



— Professional manufacturer of LED smart lamp controllers and power drives





Shenzhen zoruiyi intelligent Innovation Industry Co., Ltd. has developed into a comprehensive high-tech company integrating R & D, production and sales. The company has more than 20 R & D personnel, mainly engaged in R & D, manufacturing and design services of intelligent control systems in smart home products, and can provide complete solutions and PCBA supply. At present, the main products include: high-end intelligent bathroom mirror touch control series accessories: bathroom mirror touch switch (one touch / two touch / three touch), six button full-function controller, bathroom mirror Bluetooth sound, bathroom mirror time and temperature display module, bathroom mirror manufacturer's brand light display, bathroom mirror infrared induction switch, etc. It can provide all-round technical support and customized development services of new products for intelligent bathroom mirror manufacturers at home and abroad. The company adheres to the business philosophy of "customer first, forge ahead" and adheres to the principle of "customer first" to provide our customers with high-quality services. Welcome!

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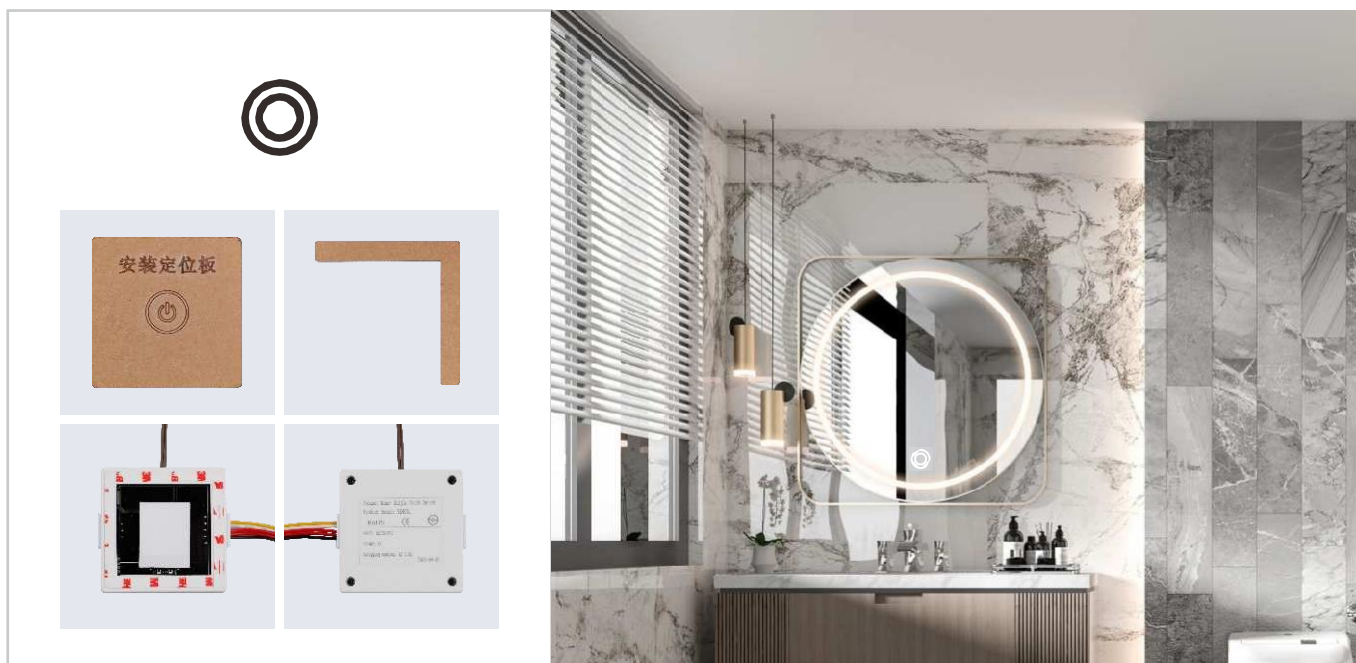
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HX-TK4001

Single-key high-power touch switch

Function Overview: Controls single-channel light strips with single color, dual light strips with dual or triple colors, high and low voltage anti-fog, memory function.

One Touch

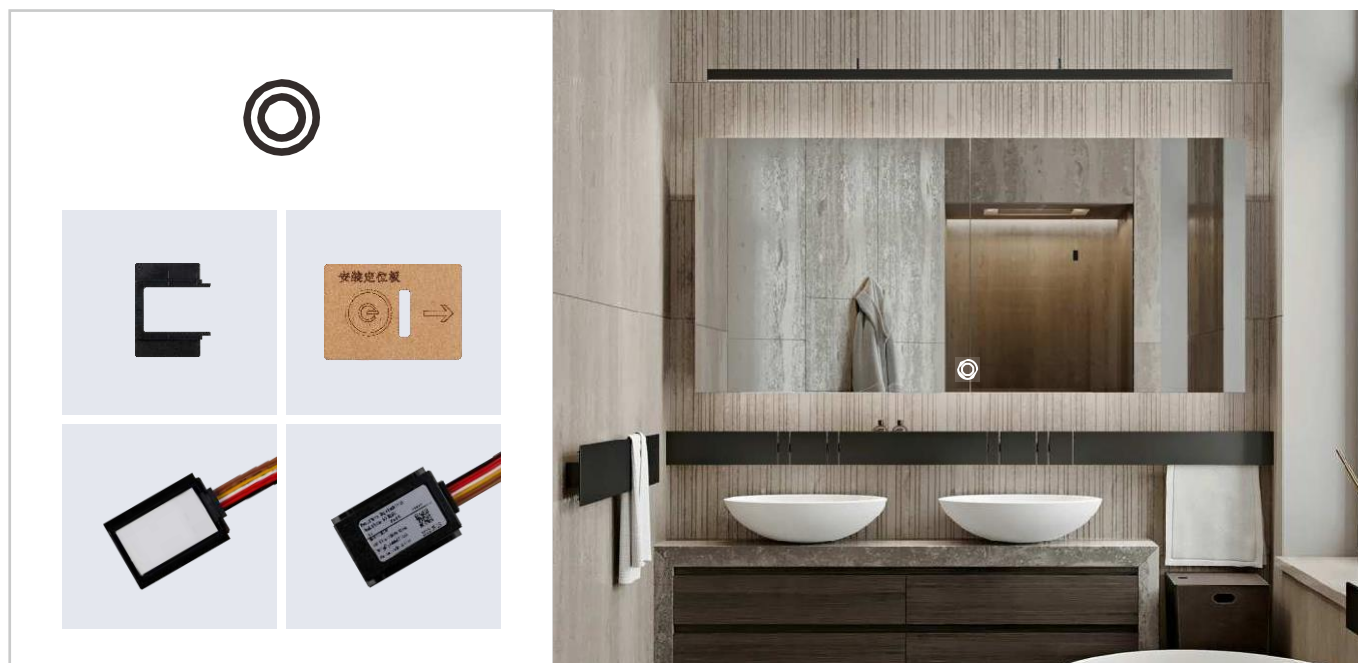


Product Dimensions:	60*60*10.5mm (Length * width * height)
Operating voltage:	DC12V/DC24V
Button backlighting:	Standby blue, function enabled white (customizable)
Max. load W (1 channel):	12V-65W/100W, 24V-130W//200W。 (Customizable)
Max. load W (2 channel):	12V-130W/200W, 24V-260W/400W (Dual-channel half-power reduction, customizable)
Max. HV anti-fog film load:	AC110V-66W / AC220V-132W
Max. LV anti-fog film load:	DC12V-36W/60W, DC24V-72W/120W
	No relay required; external relay optional; built-in relay drives anti-fog silently.
Brightness adjustment:	5%–100%
Color Temp. adjustment:	Continuous adjustment (cold→warm) / stepped adjustment (cool–neutral–warm)
Principle of touch sensing:	Capacitive touch.
Glass thickness sensor:	3-6 mm。
Optional features:	1.Power-off memory.
	2. Lights are turned off and fog off at scheduled times.
	3. Double-click to switch the light, double-click to switch to anti-fog.
	4. Gradual on/off; stepless dimming; color temp limit indicator; backlight flash on switch.
	5. Bluetooth: customizable name & password (alphanumeric)..
[Note] Supports multiple personalized logic function customization; specific logic functions are subject to actual sample submission.	

HX-TK3301

Single-Key Low-Power Touch Switch

Overview: 1-CH single-color / 2-CH dual-tri-color strips; hi/lo-voltage anti-fog; memory.



1-Key

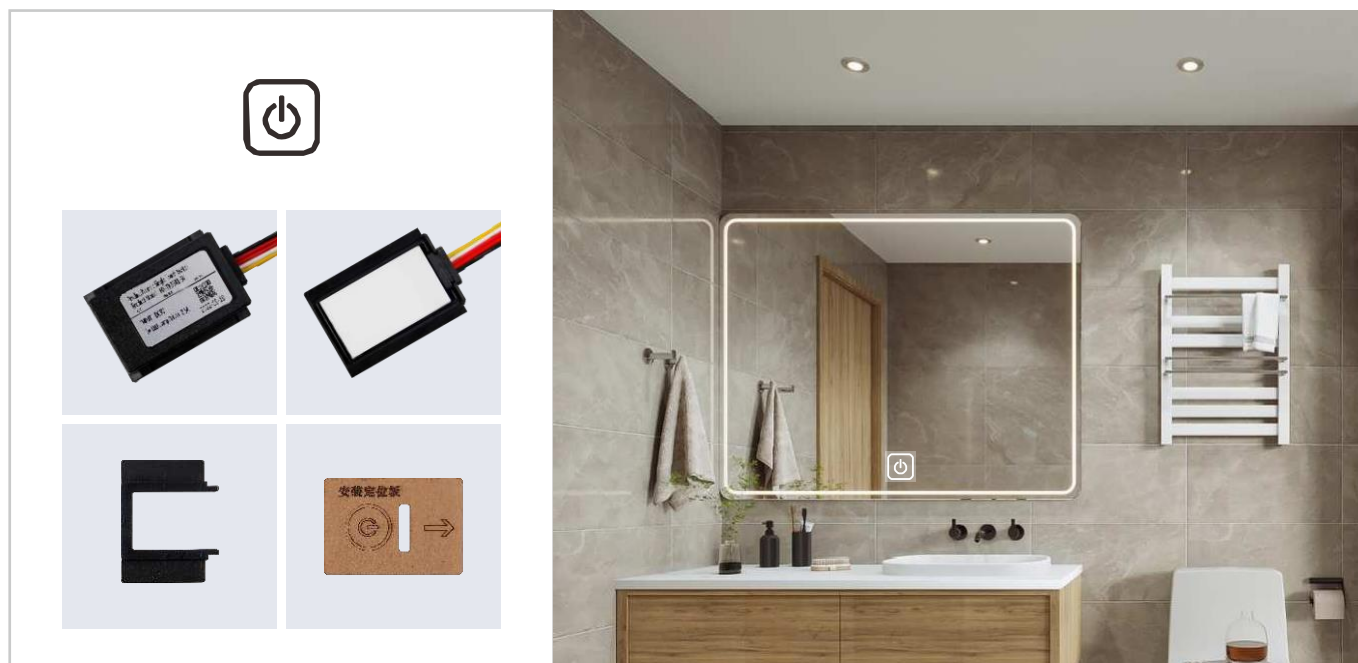
Product Size:	65.6×57.7×10.9mm (L×W×H, incl. bracket)
Operating Voltage:	DC12V (24V not supported in this version)
Key Backlight:	Blue standby / white on (customizable)
Max Load, 1-CH Strip:	12V-48W (customizable)
Max Load, 2-CH Strip:	12V-96W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	AC110V-66W / AC220V-132W
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W (no extra relay needed; external relay optional; built-in relay opens anti-fog with no noise / no spark / no cycle limit).
Brightness:	5%–100%
Color Temp:	Continuous (cool→warm) / stepped (cool–neutral–warm)
Sensing: capacitive touch; glass	3–6mm
Optional:	1. Power-off memory 2. Scheduled off / auto anti-fog off 3. Double-click toggles light & anti-fog 4. Fade in/out, stepless dimming & CCT; backlight blinks at limits 5. Bluetooth name & password customizable (alphanumeric)
[Note] Custom logic available; final per samples.	

HX-TK2901

Single-Key Battery Touch Switch

Overview: 1-CH single-color / 2-CH dual-tri-color strips; no anti-fog; memory.

1-Key

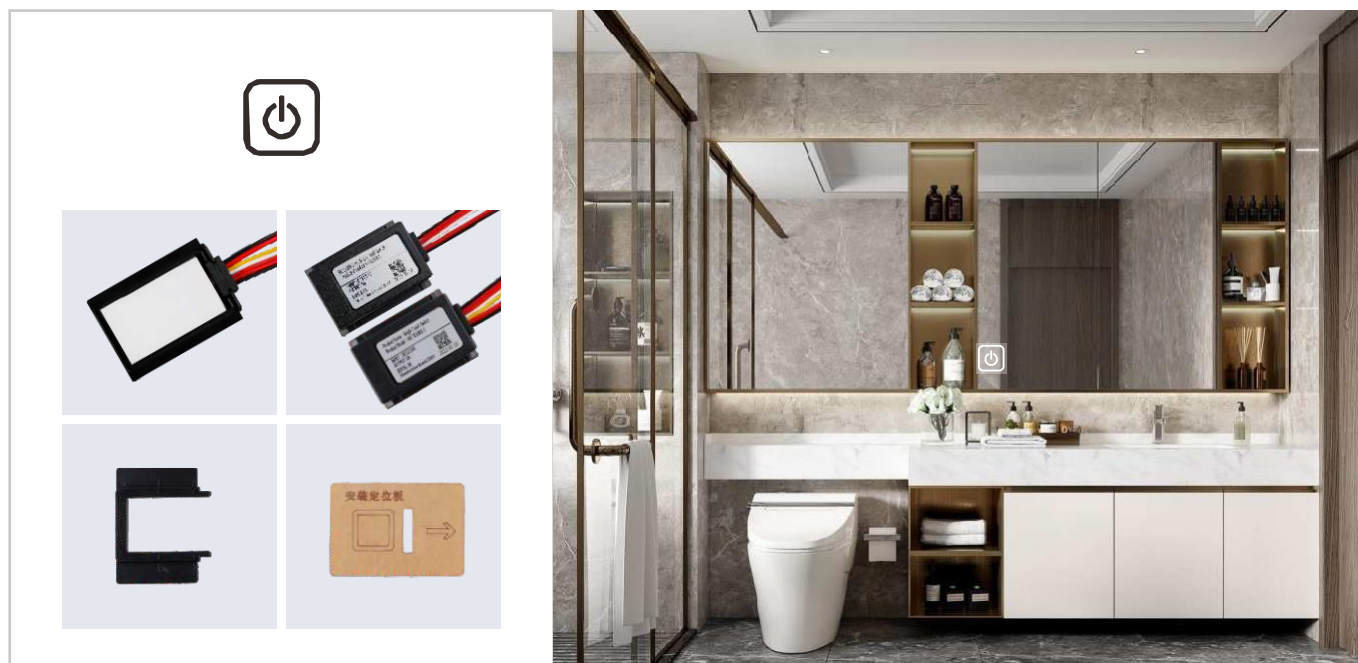


Product Size:	65.6×57.7×10.9mm (L×W×H, incl. bracket)
Operating Voltage:	Battery-powered, 4.5–12V dry cells
Key Backlight:	Blue standby / white on (customizable)
Max Load, 1-CH Strip:	12V (8 dry cells in series): 36W
	9V (6 cells): 27W
	6V (4 cells): 18W
	4.5V (3 cells): 13.5W
Max Load, 2-CH Strip:	12V (8 cells): 36W + 36W
	9V (6 cells): 27W+27W
	6V (4 cells): 18W+18W
	4.5V (3 cells): 13.5W+13.5W
Max Anti-Fog Load:	N/A
Sensing: capacitive touch glass	3–6mm
Optional:	1. Power-off memory
	2. Double-click toggles light
	3. in/out, stepless dimming & CCT; backlight blinks at limits
[Note] Custom logic available; final per samples.	

ZRY-TK2001-1/2

Single-Key External-Relay Touch Switch

Overview: 1-CH single-color / 2-CH dual-tri-color strips; hi/lo-voltage anti-fog; memory.

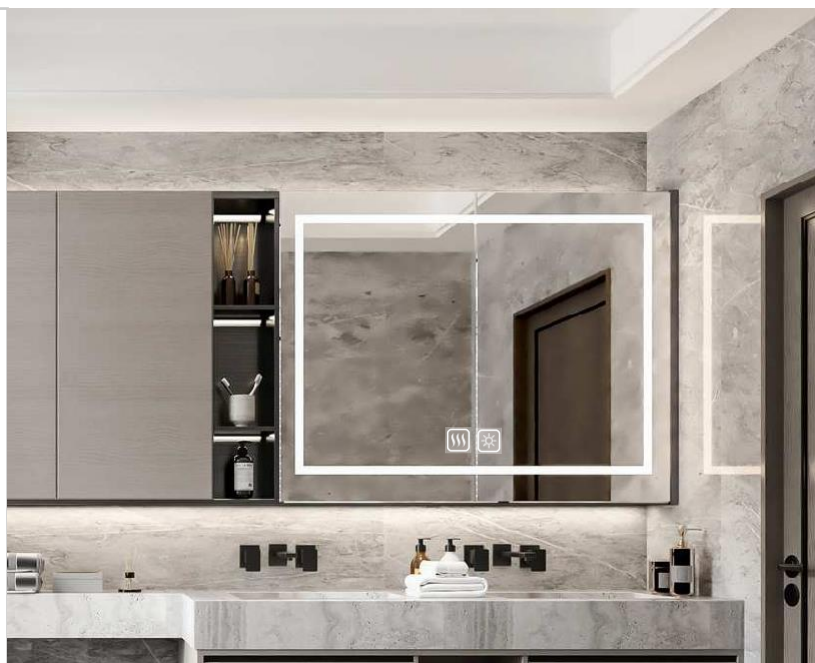
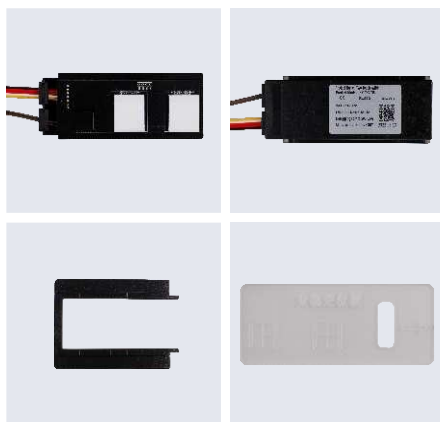


Product Size:	65.6×57.7×10.9mm (L×W×H)
	DC12V/DC24V
Key Backlight:	Blue standby / white on (customizable)
Max Load, 1-CH Strip:	12V-65W / 24V-130W (customizable)
Max Load, 2-CH Strip:	12V-130W / 24V-260W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	External Relay
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W
Brightness:	5%–100%
Color Temp:	Continuous (cool→warm) / stepped (cool–neutral–warm)
Sensing: capacitive touch glass	3–6mm
Optional:	1. Power-off memory
	2. Scheduled off / auto anti-fog off
	3. Double-click toggles light & anti-fog
	4. Fade in/out, stepless dimming & CCT; backlight blinks at limits
	5. Bluetooth name & password customizable (alphanumeric)
	6. ...
[Note] Custom logic available; final per samples.	

HX-TK2038

2-Key Touch Switch, 38mm Key Pitch

Overview: 1-CH single-color / 2-CH dual-tri-color strips; hi/lo-voltage anti-fog; memory.



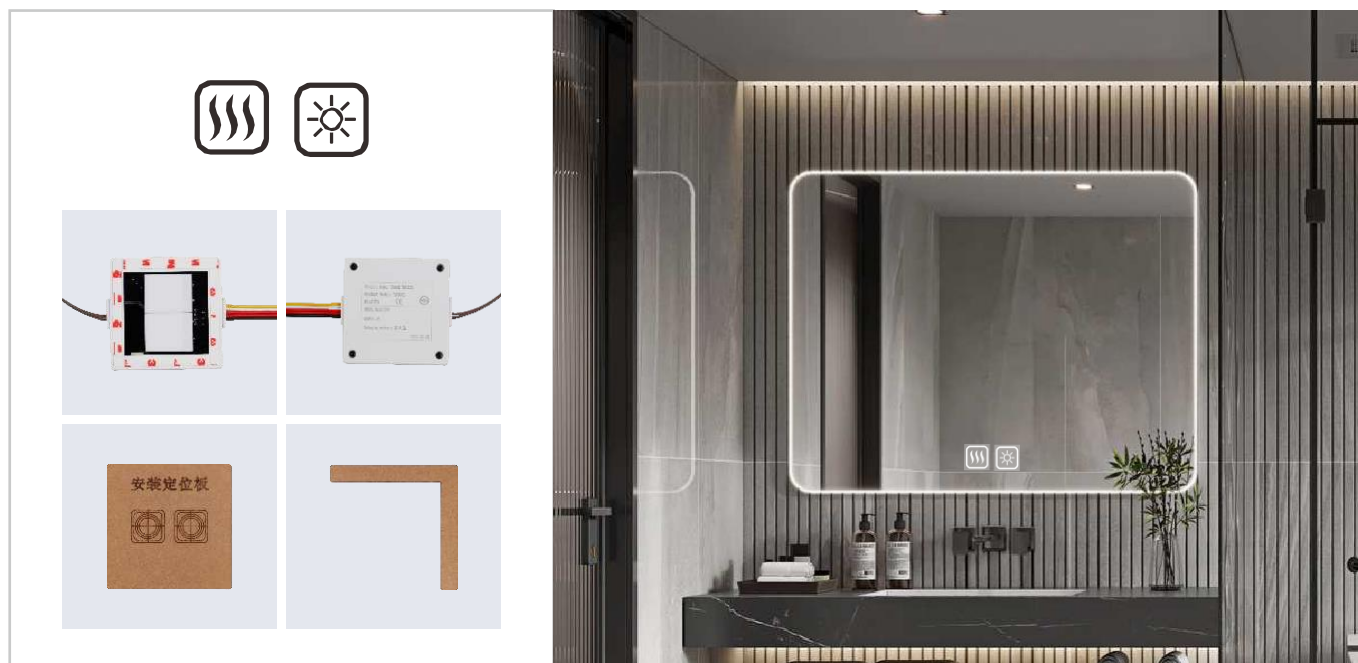
Product Size:	119.43×73.05×10.9mm (L×W×H, incl. bracket)
	DC12V/DC24V
Key Backlight:	Blue standby / white on (customizable)
Max Load, 1-CH Strip:	12V-65W / 24V-130W (customizable)
Max Load, 2-CH Strip:	12V-130W / 24V-260W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	AC110V-66W / AC220V-132W
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W
(No extra relay needed; external relay optional; built-in relay drives anti-fog silently — no noise/spark/cycle limit)	
Brightness:	5%–100%
Color Temp:	continuous (cool→warm) / stepped (cool–neutral–warm)
Sensing: capacitive touch; glass	3–6mm
Optional:	1. Power-off memory
	2. Scheduled off / auto anti-fog off
	3. Double-click toggles light & anti-fog
	4. Fade in/out, stepless dimming & CCT; backlight blinks at limits
	5. Bluetooth name & password customizable (alphanumeric)
	6. ...

[Note] Custom logic available; final per samples.

HX-TK4002

2-Key Touch Switch, 20mm Key Pitch

Overview: 1-CH single-color / 2-CH dual-tri-color strips; hi/lo-voltage anti-fog; memory.

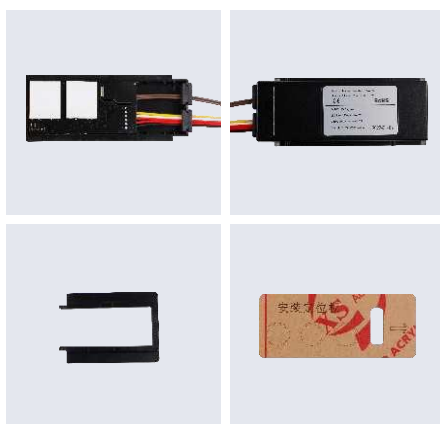


Product Size:	60×60×10.5mm (L×W×H, incl. bracket)
	DC12V/DC24V。
Key Backlight:	Blue standby / white on (customizable)
Max Load, 1-CH Strip:	12V-65W / 24V-130W (customizable)
Max Load, 2-CH Strip:	12V-130W / 24V-260W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	AC110V-66W / AC220V-132W
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W
(No extra relay needed; external relay optional; built-in relay drives anti-fog silently — no noise/spark/cycle limit)	
Brightness:	5%–100%
Color Temp:	continuous (cool→warm) / stepped (cool–neutral–warm)
Sensing: capacitive touch; glass	3–6mm
Optional:	1. Power-off memory
	2. Scheduled off / auto anti-fog off
	3. Double-click toggles light & anti-fog
	4. Fade in/out, stepless dimming & CCT; backlight blinks at limits
	5. Bluetooth name & password customizable (alphanumeric)
	6. ...
[Note] Custom logic available; final per samples.	

HX-TK3002

2-Key Touch Switch, 25mm Key Pitch

Overview: 1-CH single-color / 2-CH dual-tri-color strips; hi/lo-voltage anti-fog; memory.



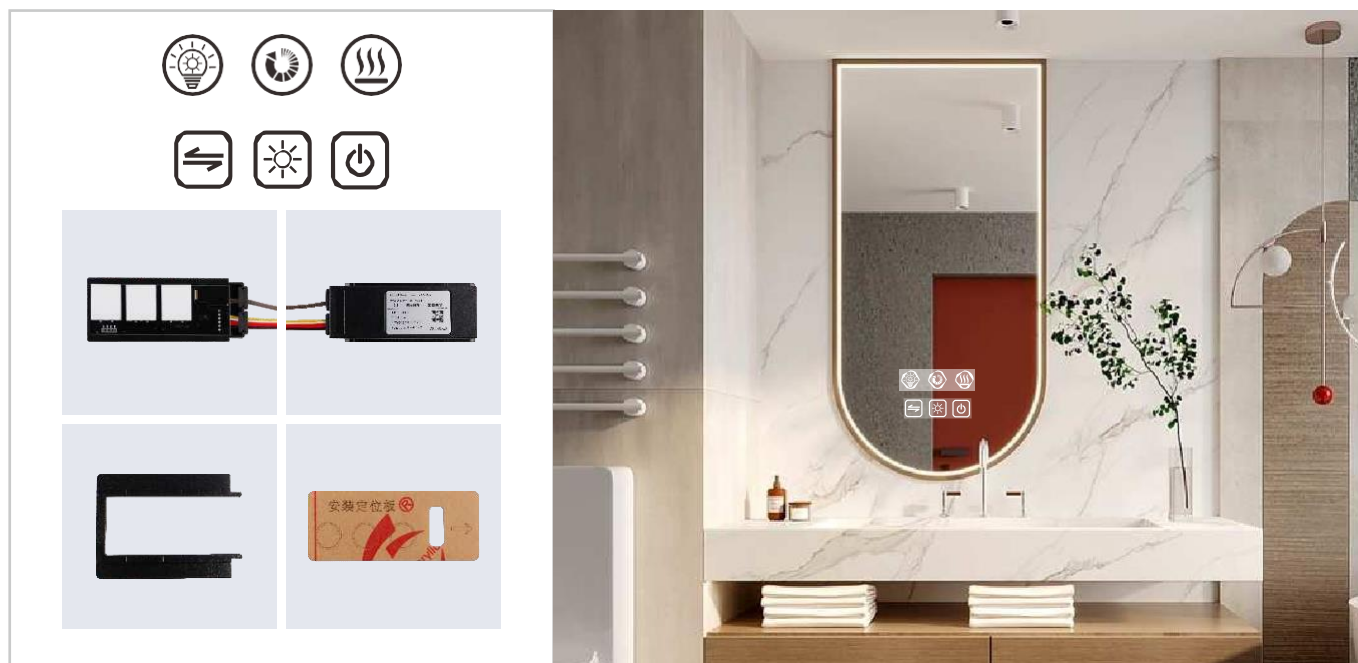
Product Size:	119.43×73.05×10.9mm (L×W×H, incl. bracket)
	DC12V/DC24V
Key Backlight:	° Blue standby / white on (customizable)
Max Load, 1-CH Strip:	12V-65W / 24V-130W (customizable)
Max Load, 2-CH Strip:	12V-130W / 24V-260W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	AC110V-66W / AC220V-132W
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W
(No extra relay needed; external relay optional; built-in relay drives anti-fog silently — no noise/spark/cycle limit)	
Brightness:	5%–100%
Color Temp:	continuous (cool→warm) / stepped (cool–neutral–warm)
Sensing: capacitive touch; glass	3–6mm
Optional:	1. Power-off memory
	2. Scheduled off / auto anti-fog off
	3. Double-click toggles light & anti-fog
	4. Fade in/out, stepless dimming & CCT; backlight blinks at limits
	5. Bluetooth name & password customizable (alphanumeric)
	6. ...

[Note] Custom logic available; final per samples.

HX-TK3003

3-Key Touch Switch

Overview: 1-CH single-color / 2-CH dual-tri-color strips; hi/lo-voltage anti-fog; memory.



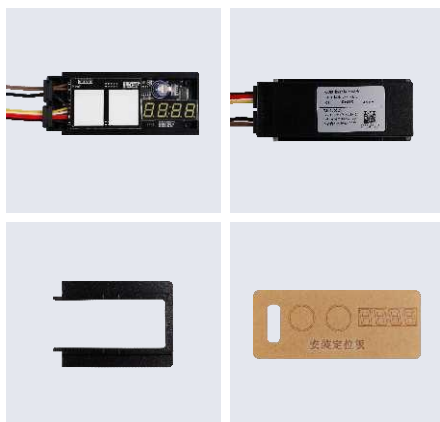
Product Size:	119.43×73.05×10.9mm (L×W×H, incl. bracket)
	DC12V/DC24V。
Key Backlight:	Blue standby / white on (customizable)
Max Load, 1-CH Strip:	12V-65W / 24V-130W (customizable)
Max Load, 2-CH Strip:	12V-130W / 24V-260W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	AC110V-66W / AC220V-132W
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W
(No extra relay needed; external relay optional; built-in relay drives anti-fog silently — no noise/spark/cycle limit)	
Brightness:	5%–100%
Color Temp:	continuous (cool→warm) / stepped (cool–neutral–warm)
Sensing: capacitive touch; glass	3–6mm
Optional:	1. Power-off memory
	2. Scheduled off / auto anti-fog off
	3. Controls two single-color strips simultaneously
	4. Double-click toggles light & anti-fog
	5. Fade in/out, stepless dimming & CCT; backlight blinks at limits
	6. Bluetooth name & password customizable (alphanumeric)
[Note] Custom logic available; final per samples.	

HX-TK3102

1/2-Key + Time & Temp

Overview: 1-CH single-color / 2-CH dual-tri-color strips; anti-fog; time & temp; memory.

15:08  



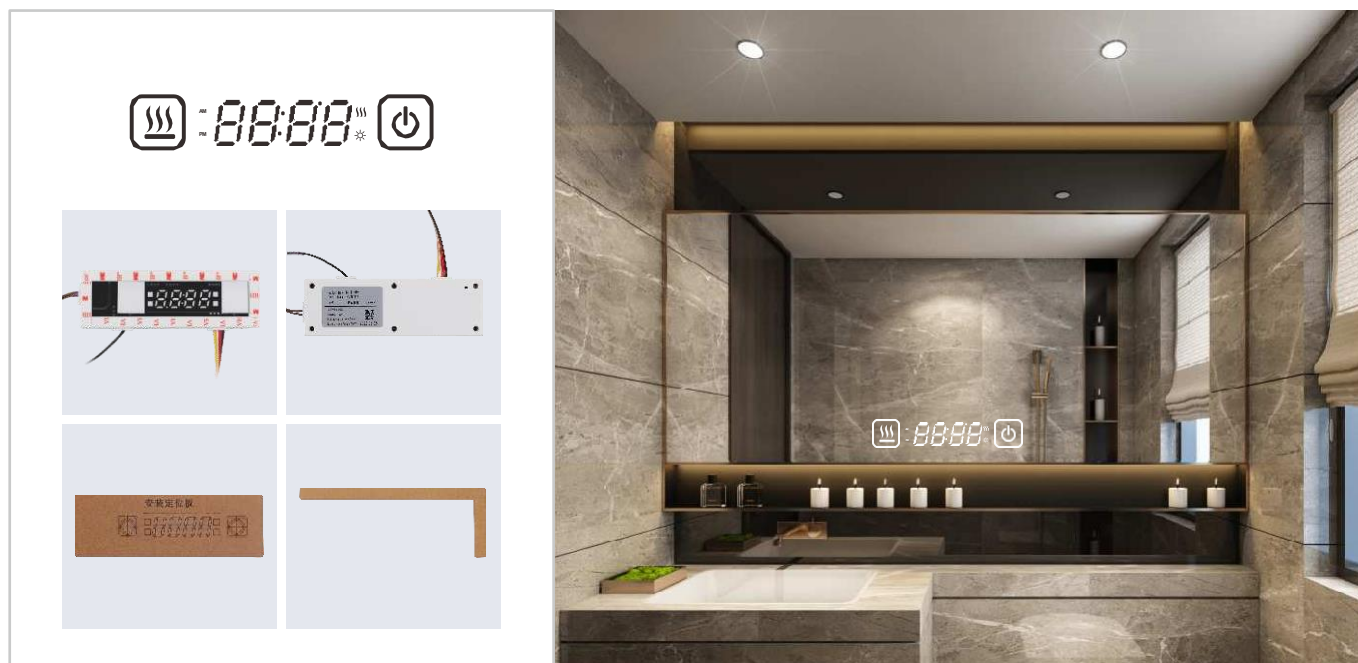
Product Size:	119.43×73.05×10.9mm (L×W×H, incl. bracket)
Operating Voltage:	DC12V/DC24V。
Key Backlight:	Blue standby / white on (customizable)
Time & Temp:	12H/24H, optional date; super-cap keeps running ~7 days off-grid °C/°F
Max Load, 1-CH Strip:	12V-48W / 24V-96W (customizable)
Max Load, 2-CH Strip:	12V-96W / 24V-192W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	AC110V-66W / AC220V-132W
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W
(No extra relay needed; external relay optional; built-in relay drives anti-fog silently — no noise/spark/cycle limit)	
Brightness:	5%–100%
Color Temp:	continuous (cool→warm) / stepped (cool–neutral–warm)
Sensing: capacitive touch; glass	3–6mm
Optional:	1. Power-off memory 2. Scheduled off / auto anti-fog off 3. Double-click toggles light & anti-fog 4. Fade in/out, stepless dimming & CCT; backlight blinks at limits 5. Bluetooth name & password customizable (alphanumeric)

[Note] Custom logic available; final per samples.

ZRY-TK1112

1/2-Key + Time & Temp

Overview: 1-CH single-color / 2-CH dual-tri-color strips; anti-fog; time & temp; memory.



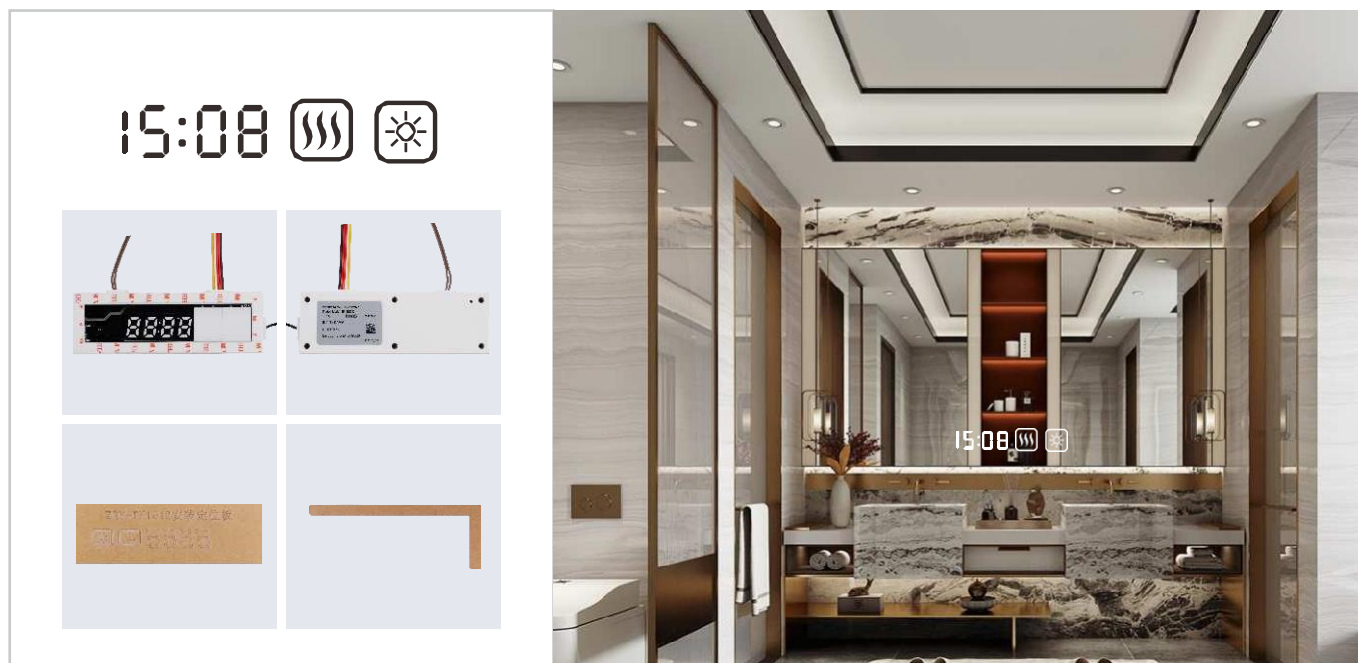
Product Size:	142×48×11mm (L×W×H)
Operating Voltage:	DC12V/DC24V
Key Backlight:	Blue standby / white on (customizable)
Time & Temp:	12H/24H, optional date; super-cap ~7 days off-grid; °C/°F
	°C/°F
Max Load, 1-CH Strip:	12V-65W / 24V-130W (customizable)
Max Load, 2-CH Strip:	12V-130W / 24V-260W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	AC110V-66W / AC220V-132W
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W
(No extra relay needed; external relay optional; built-in relay drives anti-fog silently — no noise/spark/cycle limit)	
Brightness:	5%–100%
Color Temp:	continuous (cool→warm) / stepped (cool–neutral–warm)
Sensing: capacitive touch; glass	3–6mm
Optional:	1. Power-off memory
	2. Scheduled off / auto anti-fog off
	3. Double-click toggles light & anti-fog
	4. Fade in/out, stepless dimming & CCT; backlight blinks at limits
	5. Bluetooth name & password customizable (alphanumeric)
	6. ...
[Note] Custom logic available; final per samples.	

ZRY-TK1182

1/2-Key + Time & Temp

Overview: 1-CH single-color / 2-CH dual-tri-color strips; anti-fog; time & temp; memory.

1/2-Key + Time Temp

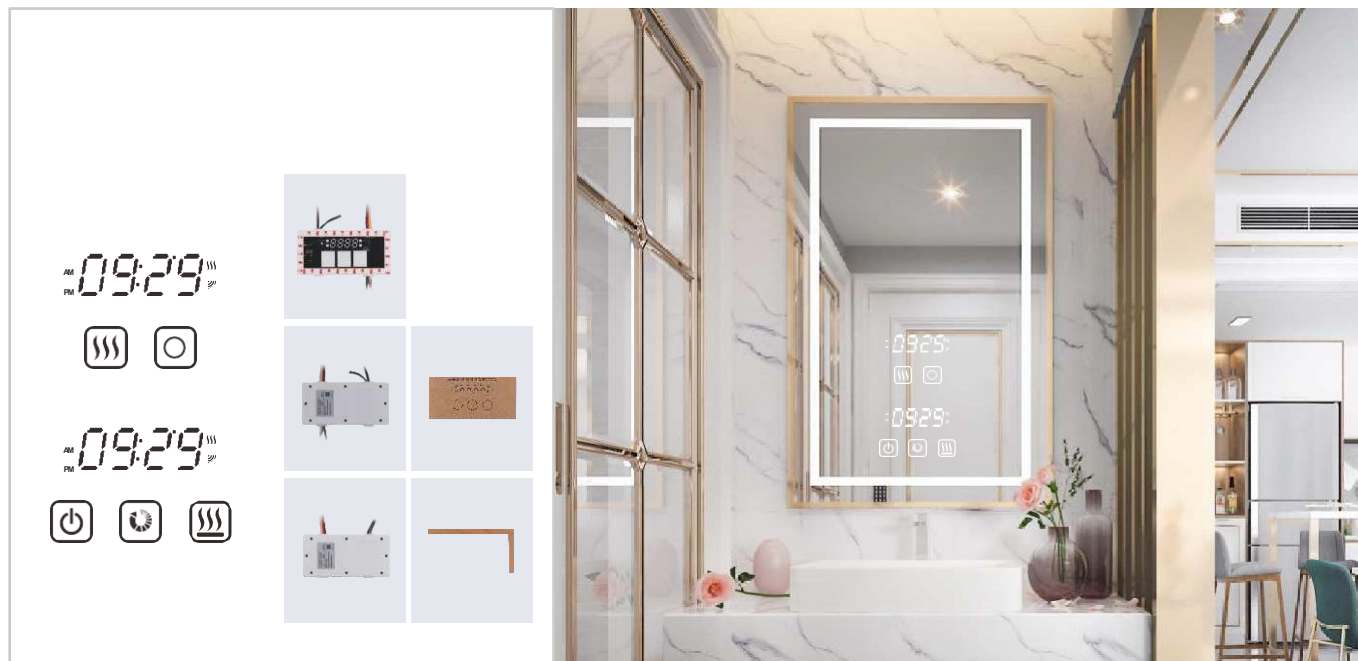


Product Size:	142×48×11mm (L×W×H)
Operating Voltage:	DC12V/DC24V
Key Backlight:	Blue standby / white on (customizable)
Time & Temp:	12H/24H, optional date; super-cap ~7 days off-grid; °C/°F
	°C/°F
Max Load, 1-CH Strip:	12V-65W / 24V-130W (customizable)
Max Load, 2-CH Strip:	12V-130W / 24V-260W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	AC110V-66W / AC220V-132W
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W
(No extra relay needed; external relay optional; built-in relay drives anti-fog silently — no noise/spark/cycle limit)	
Brightness:	5%–100%
Color Temp:	continuous (cool→warm) / stepped (cool–neutral–warm)
Sensing: capacitive touch; glass	3–6mm
Optional:	1. Power-off memory
	2. Scheduled off / auto anti-fog off
	3. Double-click toggles light & anti-fog
	4. Fade in/out, stepless dimming & CCT; backlight blinks at limits
	5. Bluetooth name & password customizable (alphanumeric)
	6. ...
[Note] Custom logic available; final per samples.	

LMS-02/03A

2/3-Key + Time & Temp + Sensing (opt.)

Overview: 1-CH single-color / 2-CH dual-tri-color strips; anti-fog; time & temp; memory.



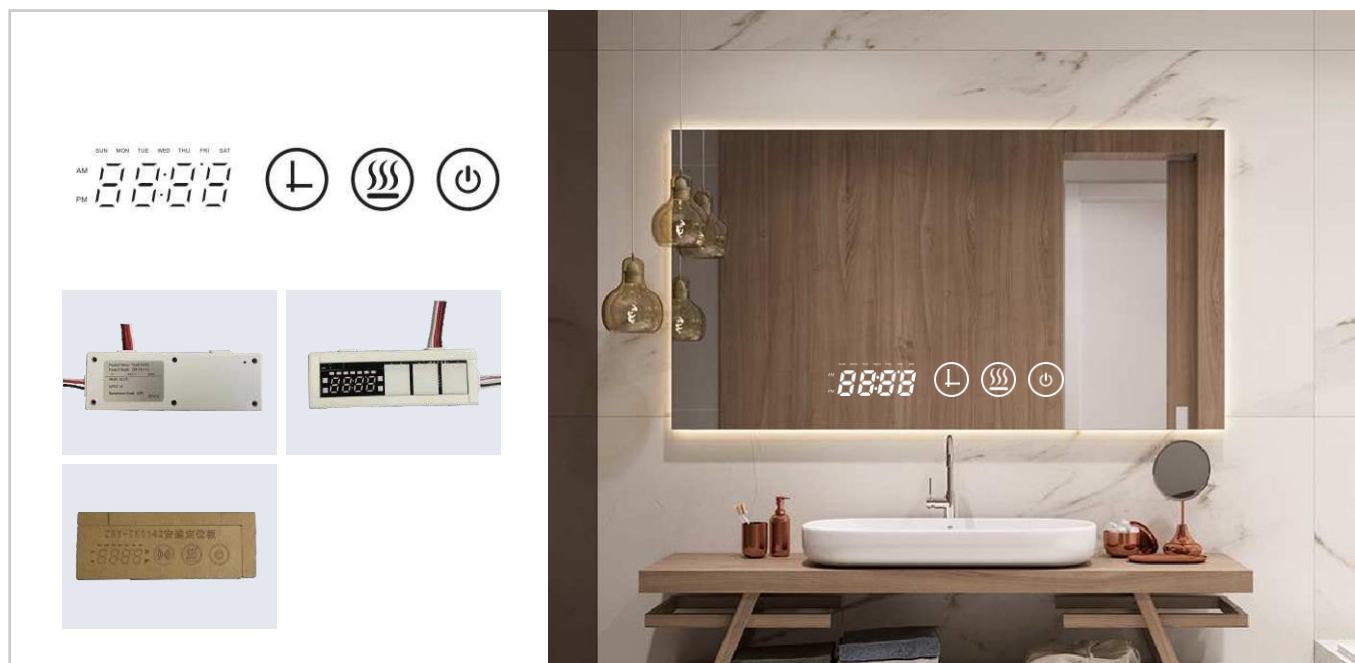
Product Name:	2/3-Key + Time & Temp
Model:	LMS-02/03A
Product Size:	148×70×10.5mm (L×W×H)
Operating Voltage:	DC12V/DC24V
Key Backlight:	Blue standby / white on (customizable)
Time & Temp:	12H/24H; super-cap keeps running ~7 days off-grid; °C/°F
Max Load, 1-CH Strip:	12V-65W / 24V-130W (customizable)
Max Load, 2-CH Strip:	12V-130W / 24V-260W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	AC110V-66W / AC220V-132W
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W
(No extra relay needed; external relay optional; built-in relay drives anti-fog silently — no noise/spark/cycle limit)	
Brightness:	5%–100%
Color Temp:	continuous (cool→warm) / stepped (cool–neutral–warm)
Sensing: capacitive touch; glass	3–6mm
Optional:	1. Power-off memory 2. Scheduled off / auto anti-fog off 3. Double-click toggles light & anti-fog 4. Fade in/out, stepless dimming & CCT; backlight blinks at limits 5. Presence sensing 6. Bluetooth name & password customizable (alphanumeric) 7. ...

ZRY-TK1113

3-Key + Time & Temp (Radar opt.)

Overview: 1-CH single-color / 2-CH dual-tri-color strips; anti-fog; time & temp; memory.

1/2/3-Key + Time & Temp

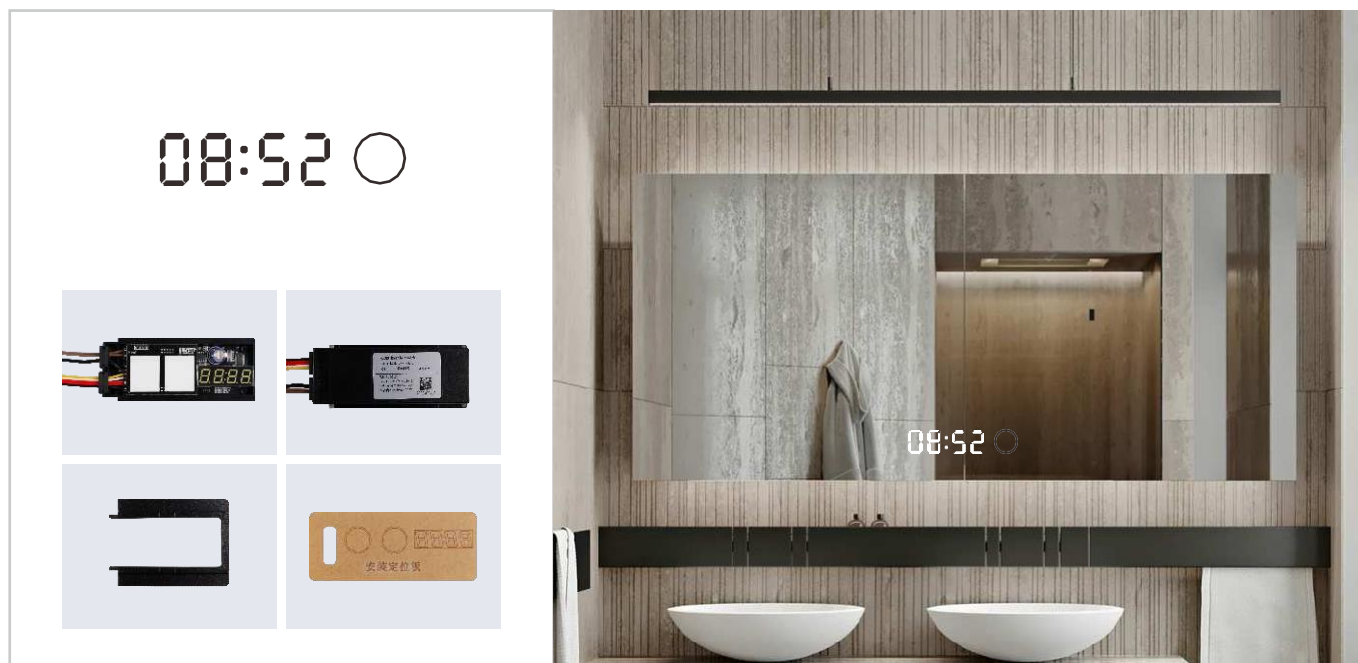


Product Size:	142×46×11mm (L×W×H)
Operating Voltage:	DC12V/DC24V
Key Backlight:	Blue standby / white on (customizable)
Time & Temp:	12H/24H; super-cap keeps running ~7 days off-grid; °C/°F
Max Load, 1-CH Strip:	12V-65W / 24V-130W (customizable)
Max Load, 2-CH Strip:	12V-130W / 24V-260W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	External Relay
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W。
Brightness:	5%–100%
Color Temp:	Continuous (cool→warm) / stepped (cool–neutral–warm)
Sensing: capacitive touch; glass	3–6mm
Optional:	1. Power-off memory
	2. Scheduled off / auto anti-fog off
	3. Double-click toggles light & anti-fog
	4. Fade in/out, stepless dimming & CCT; backlight blinks at limits
	5. Presence sensing
	6. Bluetooth name & password customizable (alphanumeric)
	7. ...
[Note] Custom logic available; final per samples.	

HX-TK3101

Standalone Time/Temp Module

Overview: Pure mirror time & temp display.

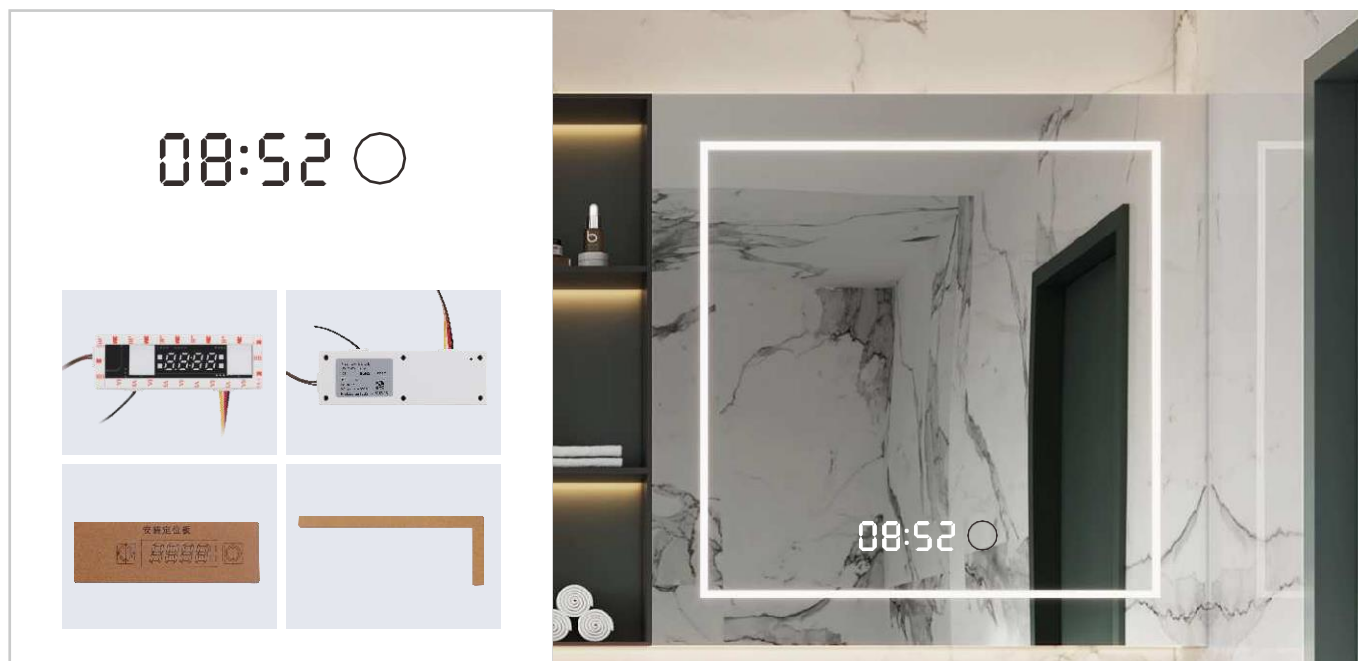


Product Size:	119.43×73.05×10.9mm (L×W×H, incl. bracket)
Operating Voltage:	DC12V/DC24V
Key Backlight:	Blue standby / white on (customizable)
Time & Temp:	12H/24H, optional date; super-cap ~7 days off-grid; °C/°F
	°C/°F
Max Strip Load:	N/A
Max Anti-Fog Load:	N/A
Sensing:	Capacitive touch
Time Setting:	mirror button / mechanical key;
glass	3–6mm
Optional:	can be paralleled with other key switches
[Note] Custom logic available; final per samples.	

ZRY-TK1112

Standalone Time/Temp Module

Overview: Pure mirror time & temp display.

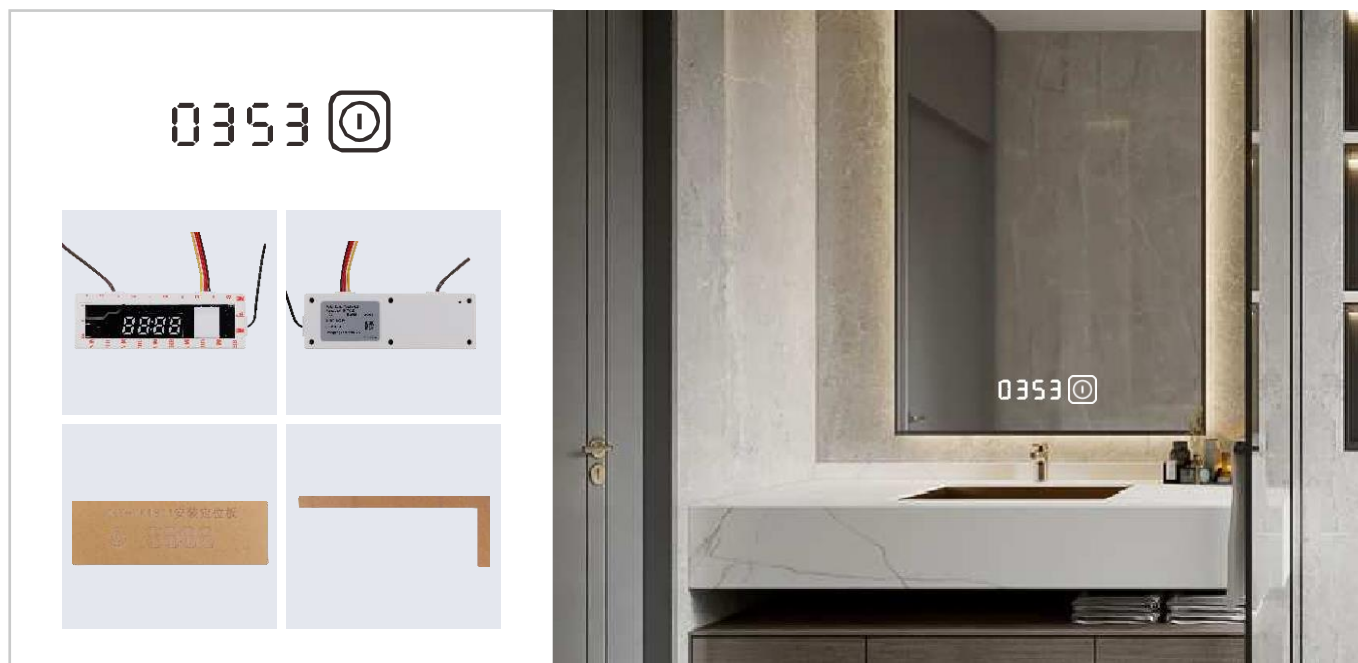


Product Size:	142×48×11mm (L×W×H)
Operating Voltage:	DC12V/DC24V
Key Backlight:	Blue standby / white on (customizable)
Time & Temp:	12H/24H, optional date; super-cap ~7 days off-grid; °C/°F
	°C/°F
Max Strip Load:	N/A
Max Anti-Fog Load:	N/A
Sensing:	Capacitive touch
Time Setting:	mirror button;
glass	3–6mm
Optional:	can be paralleled with other key switches
[Note] Custom logic available; final per samples.	

ZRY-TK1181

1-Key Touch + Time/Temp Module

Overview: Pure mirror time & temp display.



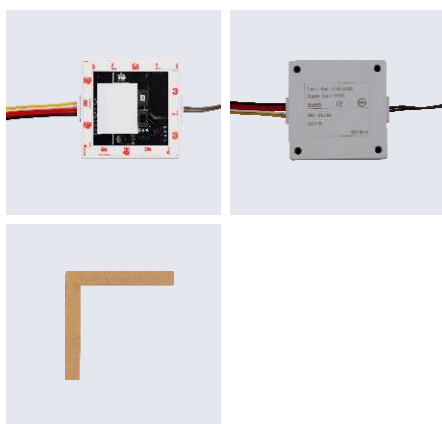
Product Size:	142×48×11 mm (L×W×H)
Operating Voltage:	DC12V/DC24V
Key Backlight:	Blue standby / white on (customizable)
Time & Temp:	12H/24H, optional date; super-cap keeps running ~7 days off-grid; °C/°F
	°C/°F
Max Strip Load:	N/A
Max Anti-Fog Load:	N/A
Sensing:	Capacitive touch
Time Setting:	mirror button;
glass	3–6mm
Optional:	can be paralleled with other key switches
[Note] Custom logic available; final per samples.	

HX-TK4231

Hand-Wave Sensing Switch

Overview: 1-CH single-color / 2-CH dual-tri-color strips; hi/lo-voltage anti-fog; memory.

● KOHLDA ●

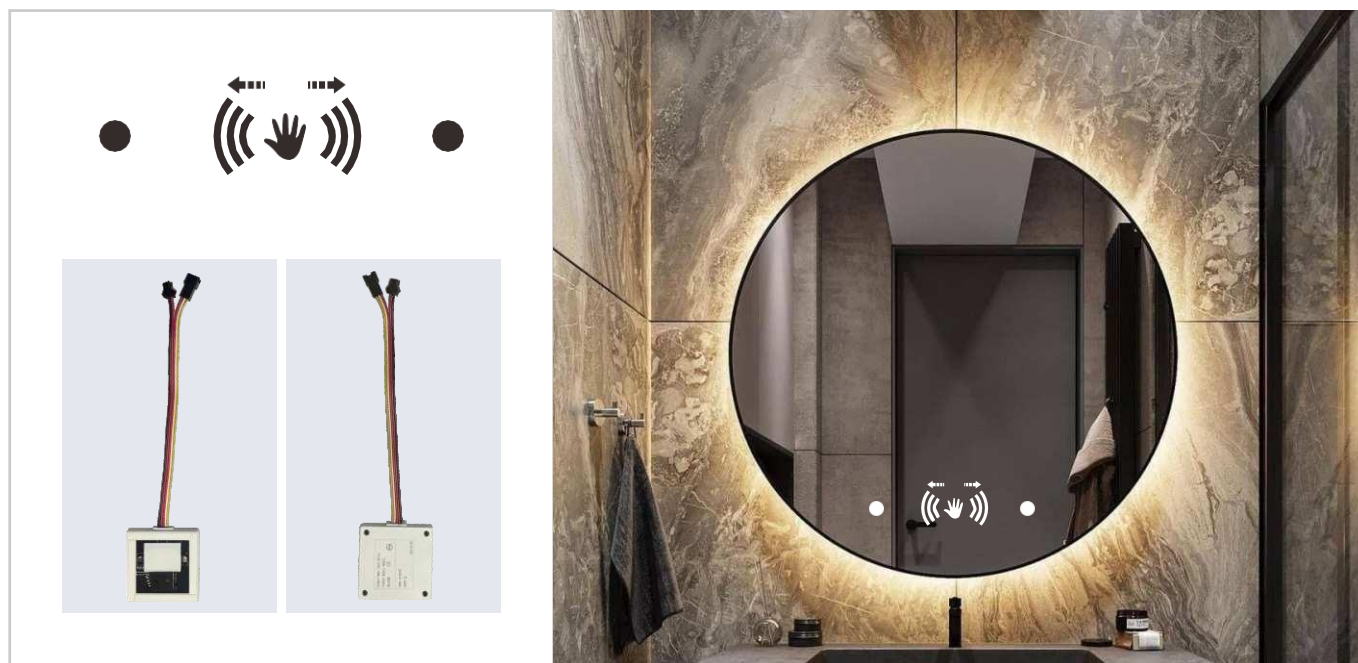


Product Size:	60×60×10.5mm (L×W×H)
Operating Voltage:	DC12V/DC24V
Key Backlight:	Blue standby / white on (customizable)
Hand-Wave Range:	5–15 cm
Max Load, 1-CH Strip:	12V-65W / 24V-130W (customizable)
Max Load, 2-CH Strip:	12V-130W / 24V-260W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	AC110V-66W / AC220V-132W
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W
(No extra relay needed; external relay optional; built-in relay drives anti-fog silently — no noise/spark/cycle limit)	
Brightness:	5%–100%
Color Temp:	continuous (cool→warm) / stepped (cool–neutral–warm)
Hand-wave sensing:	infrared;
glass	3–6mm
Optional:	1. Power-off memory
	2. Scheduled off / auto anti-fog off
	3. Fade in/out, stepless dimming & CCT; backlight blinks at limits
	4. Bluetooth name & password customizable (alphanumeric)
	5. Sensor window on one side / both sides (per model)
	6. ...
[Note] Custom logic available; final per samples.	

ZRY-TK4231

Hand-Wave + Radar

Overview: 1-CH single-color / 2-CH dual-tri-color strips; anti-fog; radar on/off; hand-wave CCT switching, stepless dimming & CCT.

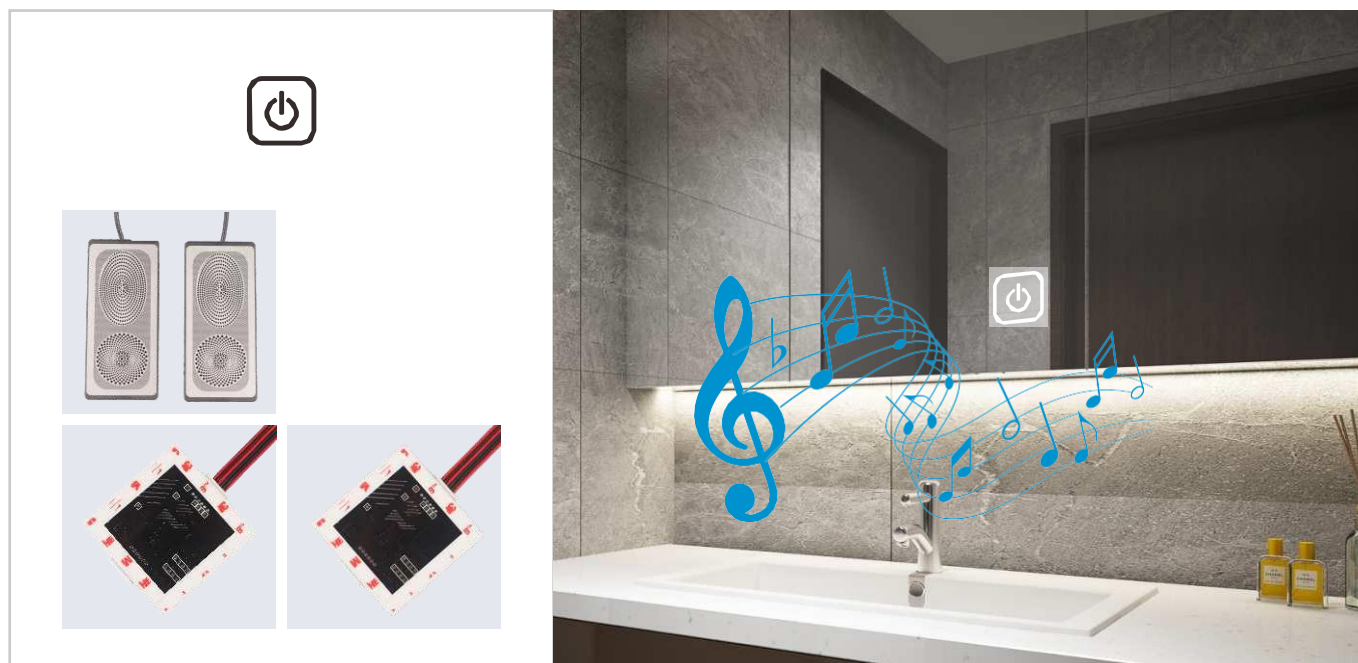


Product Size:	60×60×10.5mm (L×W×H)
Operating Voltage:	DC12V/DC24V
Key Backlight:	Blue standby / white on (customizable)
Max Load, 1-CH Strip:	12V-65W / 24V-130W (customizable)
Max Load, 2-CH Strip:	12V-130W / 24V-260W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	AC110V-66W / AC220V-132W
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W。
Brightness:	5%–100%
Color Temp:	Continuous (cool→warm) / stepped (cool–neutral–warm)
Radar Range:	Radar (microwave) on/off, 1–3 m (customizable)
Hand-Wave Range:	5–15 cm
Optional:	1. Power-off memory
	2. Scheduled off / auto anti-fog off
	3. Fade in/out, stepless dimming & CCT; backlight blinks at limits
	4. ...

ZORY-A2210 (Gen 4) / ZORY-A2212 (Gen 4)

Mini Bluetooth Module

Overview: Plays phone music via Bluetooth; control volume, track, play/pause from phone.



Product Size:	60×60×10mm (L×W×H)
Operating Voltage:	DC12V/DC24V
Bluetooth:	Bluetooth 5.1, dual-mode, 2.4GHz
Audio:	Power: 4.5W×2, SNR 80dB, impedance 4Ω, THD ≤10%
BT Range:	10 m
Optional:	1. BT name & password customizable & numbered (alphanumeric)
	2. Compatible with any touch switch; keys control BT on/off, etc.
	3. Multiple speaker sizes available — see Bluetooth Series or spec sheets.
	4. ...
[Note] Custom logic available; final per samples.	

ZORY-A2110 (J) / ZORY-A2212 (G)

Speaker with Built-in BT Module

Built-in BT Speaker Module

Dimensions: 109×49×20/25mm (L×W×H)

Operating Voltage: DC12V/DC24V

Bluetooth: 5.1, dual-mode, 2.4GHz

Audio: 4.5W×2, SNR 80dB, 4Ω, THD ≤10%

BT range: 10m

Overview: streams phone music via Bluetooth; volume, track and playback controlled from the phone.



Bluetooth
h Series

Options & Notes

1. BT name & password customizable & numbered (alphanumeric)
 2. Works with any touch switch; keys control BT on/off
 3. 20/25/35mm speaker shells available — see spec sheets
- [Note] Custom logic available; final per samples.



ZRY-SPK15

Speaker without BT module

Dimensions: 120×80×15.2mm (L×W×H)

Operating Voltage: DC12V/DC24V

Protection: IP44; front sound output; max load 3W



ZRY-SPK20/25

Speaker without BT Module

Speaker without BT module

Product Size: 109×49×20/25mm (L×W×H)

Operating Voltage: DC12V/DC24V

IP Rating: IP44

Sound: front output; Max load 5W



ZRY-SPK11

Speaker without BT module

Product Size: 120×80×17.5mm (L×W×H)

Operating Voltage: DC12V/DC24V

Sound: side output; IP44

Max load 3W



ZRY-SPK17

Speaker without BT module

Product Size: 120×80×17.5mm (L×W×H)

Operating Voltage: DC12V/DC24V

Sound: side output; IP44; Max load 3W



Style 1 (No Trim)

Style 2 (Trimmed)

ZORY-SPK09

Passive Speaker

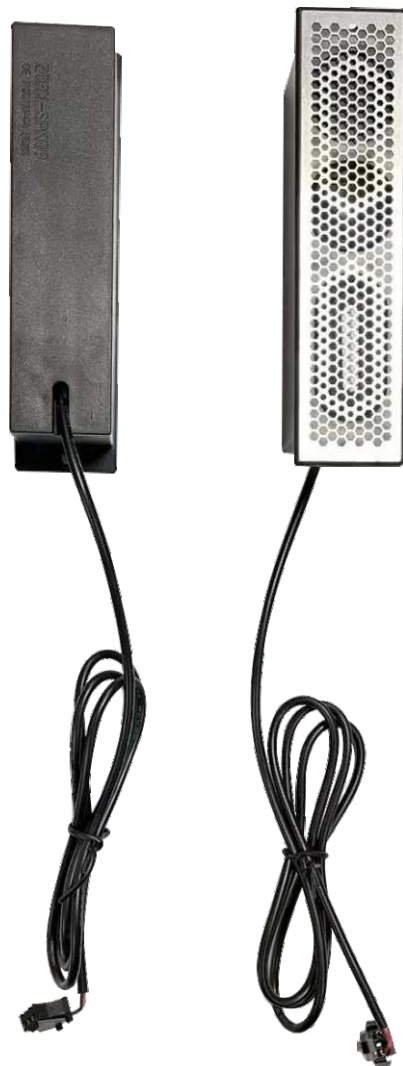
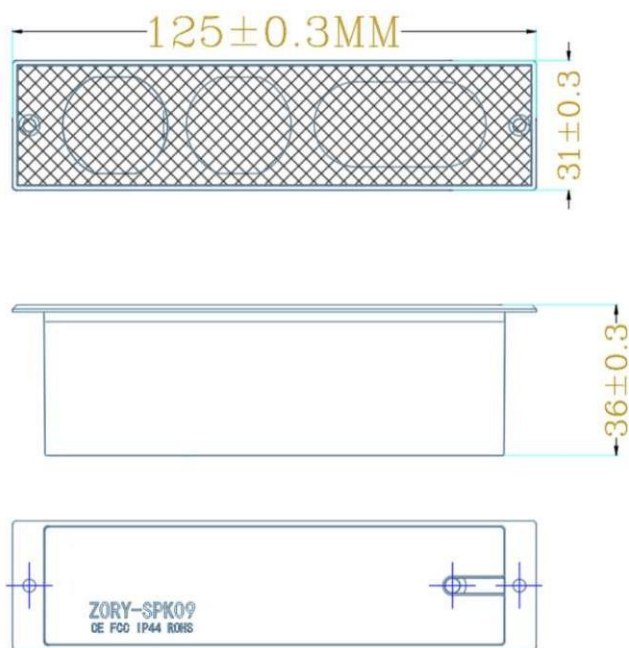
Passive speaker

Overview: used with Bluetooth touch switches / BT modules.

Product Size: 125×31×36mm (L×W×H, incl. trim)

Operating Voltage: DC12V/DC24V; IP44; CE ROHS FCC

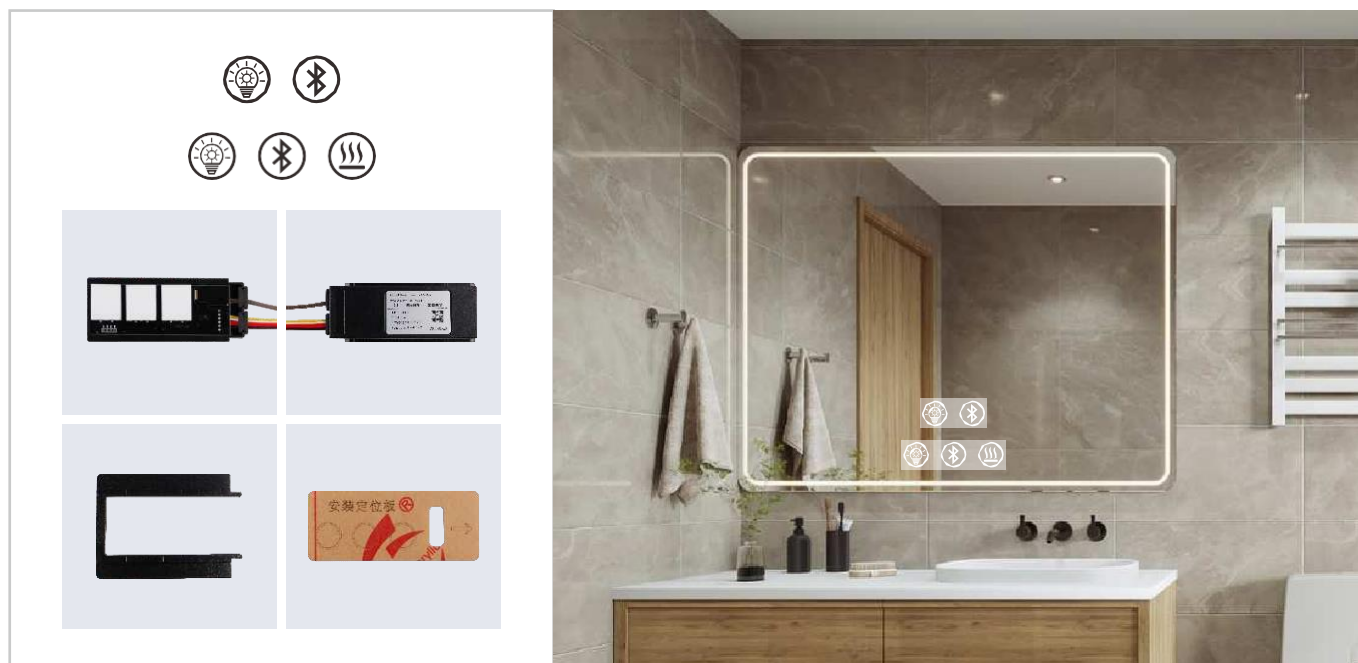
Sound: side output; Max load 3W



HX-TK3003

2/3-Key + Bluetooth

Overview: 1-CH single-color / 2-CH dual-tri-color strips; anti-fog; Bluetooth (active speaker); memory.

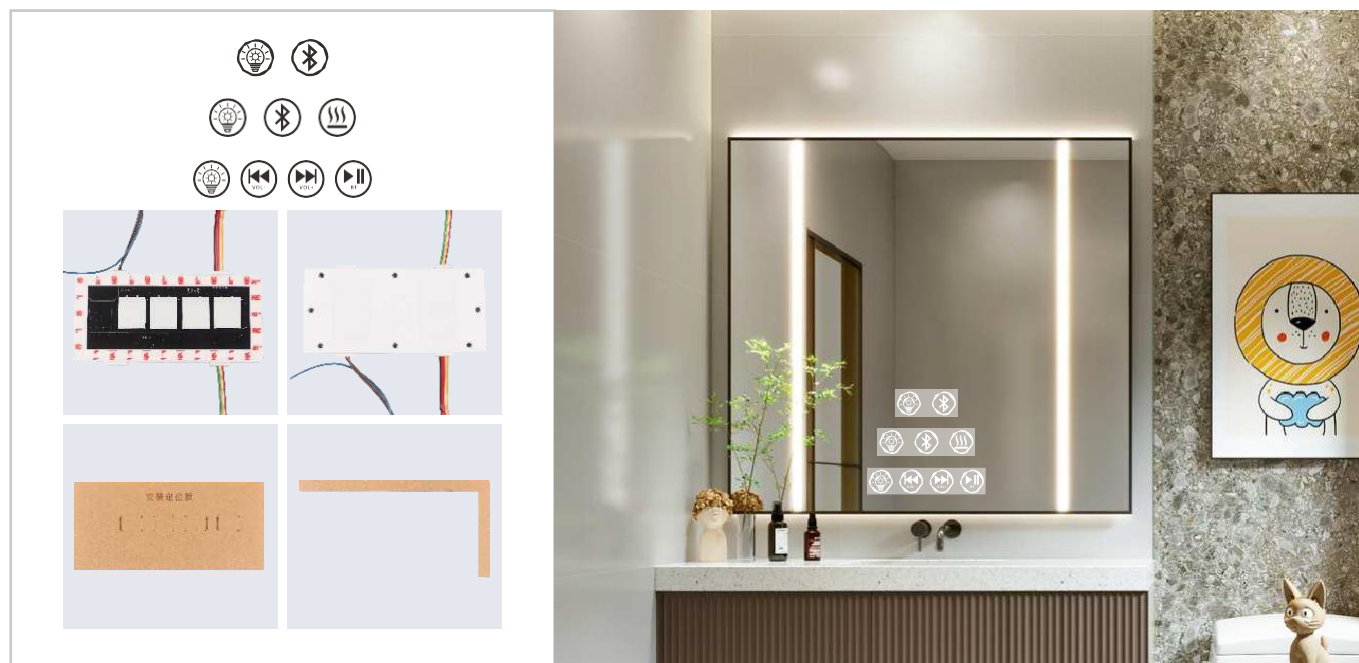


Product Name:	2/3-Key + Bluetooth
Model:	HX-TK3003
Product Size:	119.43×73.05×10.9mm (L×W×H, incl. bracket)
Operating Voltage:	DC12V/DC24V
Key Backlight:	Blue standby / white on (customizable)
Max Load, 1-CH Strip:	12V-65W / 24V-130W (customizable)
Max Load, 2-CH Strip:	12V-130W / 24V-260W (dual-CH half-power; 3-key: no dual-color strip; customizable)
Max HV Anti-Fog Load:	AC110V-66W / AC220V-132W
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W
(No extra relay needed; external relay optional; built-in relay drives anti-fog silently — no noise/spark/cycle limit)	
Brightness:	5%–100%
Color Temp:	continuous (cool→warm) / stepped (cool–neutral–warm)
Sensing:	capacitive touch;
glass	3–6mm
Optional:	1. Power-off memory
	2. Scheduled off / auto anti-fog off
	3. Double-click toggles light & anti-fog
	4. Fade in/out, stepless dimming & CCT; backlight blinks at limits
	5. Bluetooth name & password customizable (alphanumeric)

HX-TK5003

2/3/4-Key + Bluetooth

Overview: 1-CH single-color / 2-CH dual-tri-color strips; anti-fog; Bluetooth (passive speaker); memory.

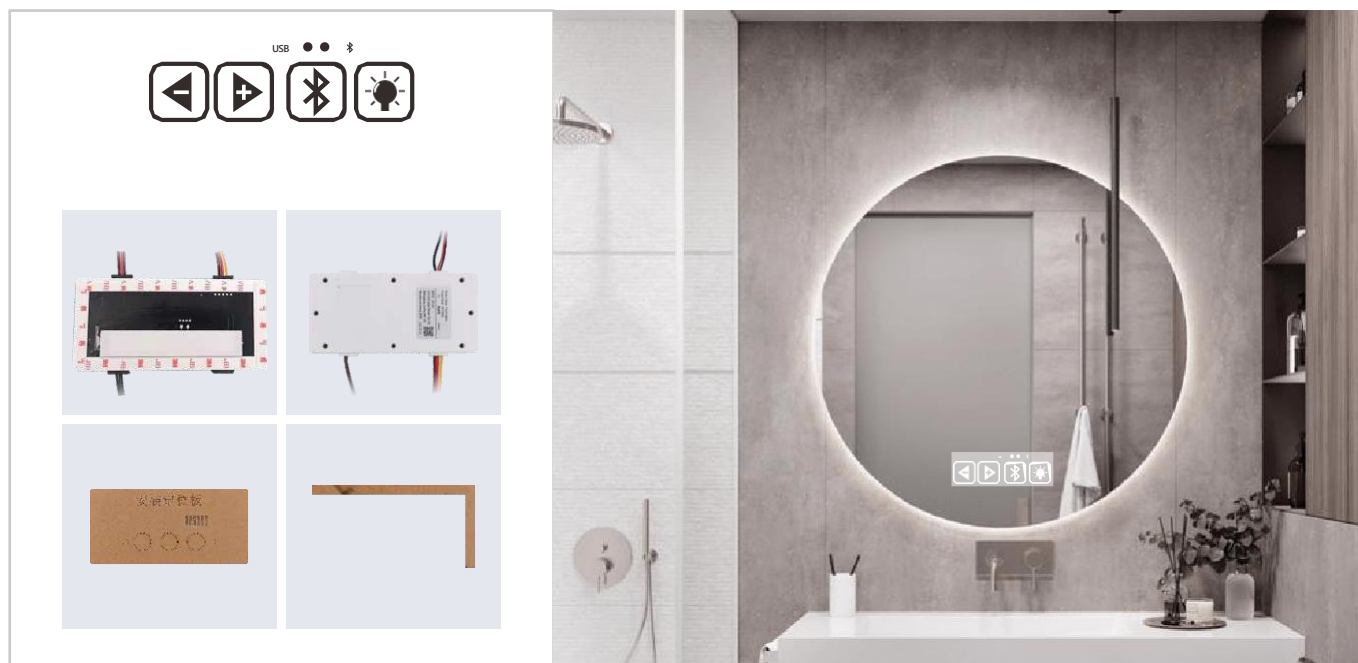


Product Name:	2/3/4-Key + Bluetooth
	HX-TK5003
Product Size:	148×70×10.5mm (L×W×H)
Operating Voltage:	DC12V/DC24V
Key Backlight:	Blue standby / white on (customizable)
Max Load, 1-CH Strip:	12V-65W / 24V-130W (customizable)
Max Load, 2-CH Strip:	12V-130W / 24V-260W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	AC110V-66W / AC220V-132W
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W
(No extra relay needed; external relay optional; built-in relay drives anti-fog silently — no noise/spark/cycle limit)	
Brightness:	5%–100%
Color Temp:	continuous (cool→warm) / stepped (cool–neutral–warm)
Sensing:	capacitive touch;
glass	3–6mm
Optional:	1. Power-off memory
	2. Scheduled off / auto anti-fog off
	3. Double-click toggles light & anti-fog
	4. Fade in/out, stepless dimming & CCT; backlight blinks at limits
	5. Bluetooth name & password customizable (alphanumeric)

HX-TK605

4-Key + Bluetooth + USB

Overview: 1-CH single-color / 2-CH dual-tri-color strips; anti-fog; Bluetooth (passive speaker); mirror-music track switch, play/pause, volume; USB playback; touch-key switches USB/BT modes; memory.



Product Name:	4-Key + Bluetooth
	HX-TK605
Product Size:	148×70×10.5mm (L×W×H)
Operating Voltage:	DC12V/DC24V
Key Backlight:	Blue standby / white on (customizable)
Max Load, 1-CH Strip:	12V-65W / 24V-130W (customizable)
Max Load, 2-CH Strip:	12V-130W / 24V-260W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	AC110V-66W / AC220V-132W
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W
(No extra relay needed; external relay optional; built-in relay drives anti-fog silently — no noise/spark/cycle limit)	
Brightness:	5%–100%
Color Temp:	continuous (cool→warm) / stepped (cool–neutral–warm)
Sensing:	capacitive touch;
glass	3–6mm
Optional:	1. Power-off memory
	2. Scheduled off / auto anti-fog off
	3. Double-click toggles light & anti-fog
	4. Fade in/out, stepless dimming & CCT; backlight blinks at limits
	5. Bluetooth name & password customizable (alphanumeric)
	6. USB port: optional fast charging for phones

HX-BT4010 / HX-BT6020

4/6-Key + Display + Bluetooth

(IR optional; or 4-key display without BT: HX-TK4010)

Controls single/dual-color strips, anti-fog, time & temp, Bluetooth (blue/black screen)

See Human Presence Sensing Series



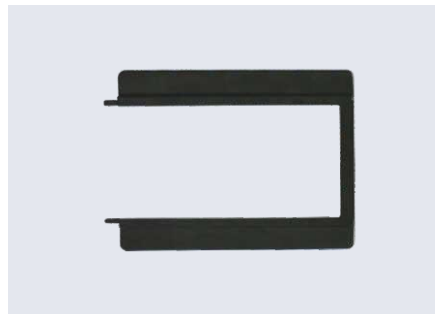
HX-BT4010



HX-BT6020



HX-TK4010



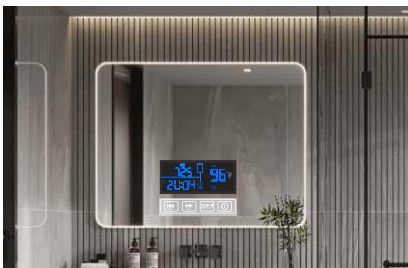
ZRY-BA7124 / ZRY-BA7126

Ultra-Thin 4/6-Key + Display + Bluetooth

(Radar optional; or 4-key display without BT: ZRY-TA7124)

Controls single/dual-color strips, anti-fog, time & temp, Bluetooth (blue/black screen)

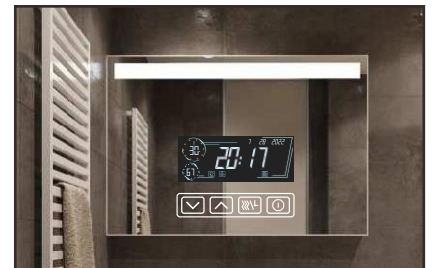
See Human Presence Sensing Series



ZRY-BA7124



ZRY-BA7126



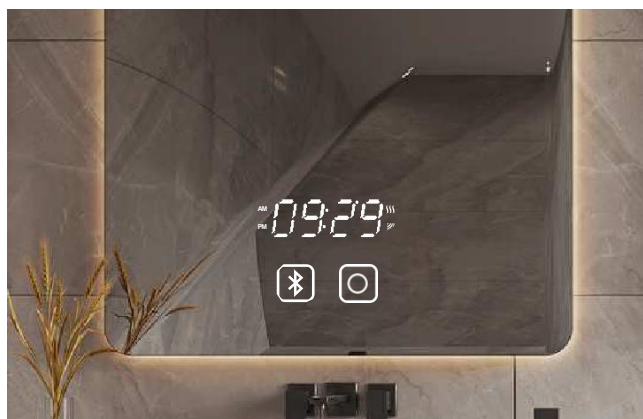
ZRY-TA7124



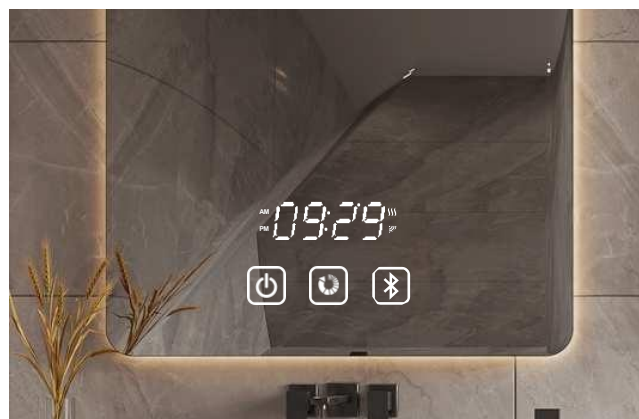
2/3-Key + Time & Temp + Bluetooth

Controls single/dual-color strips, anti-fog, time & temp, Bluetooth (presence sensing optional)

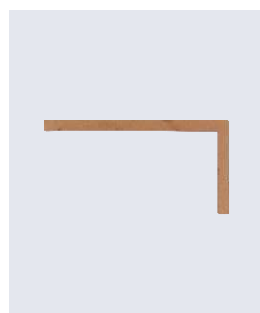
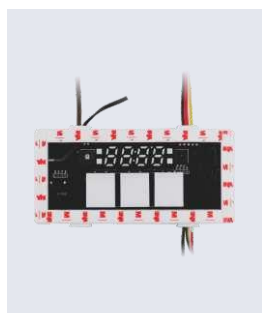
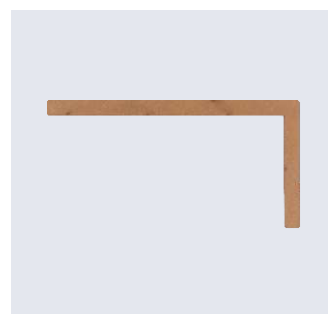
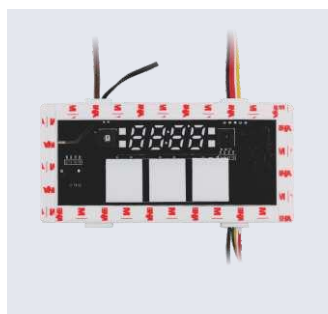
See Human Presence Sensing Series



2-Key + Time & Temp + BT (LMS-02A)



3-Key + Time & Temp + BT (LMS-03A)

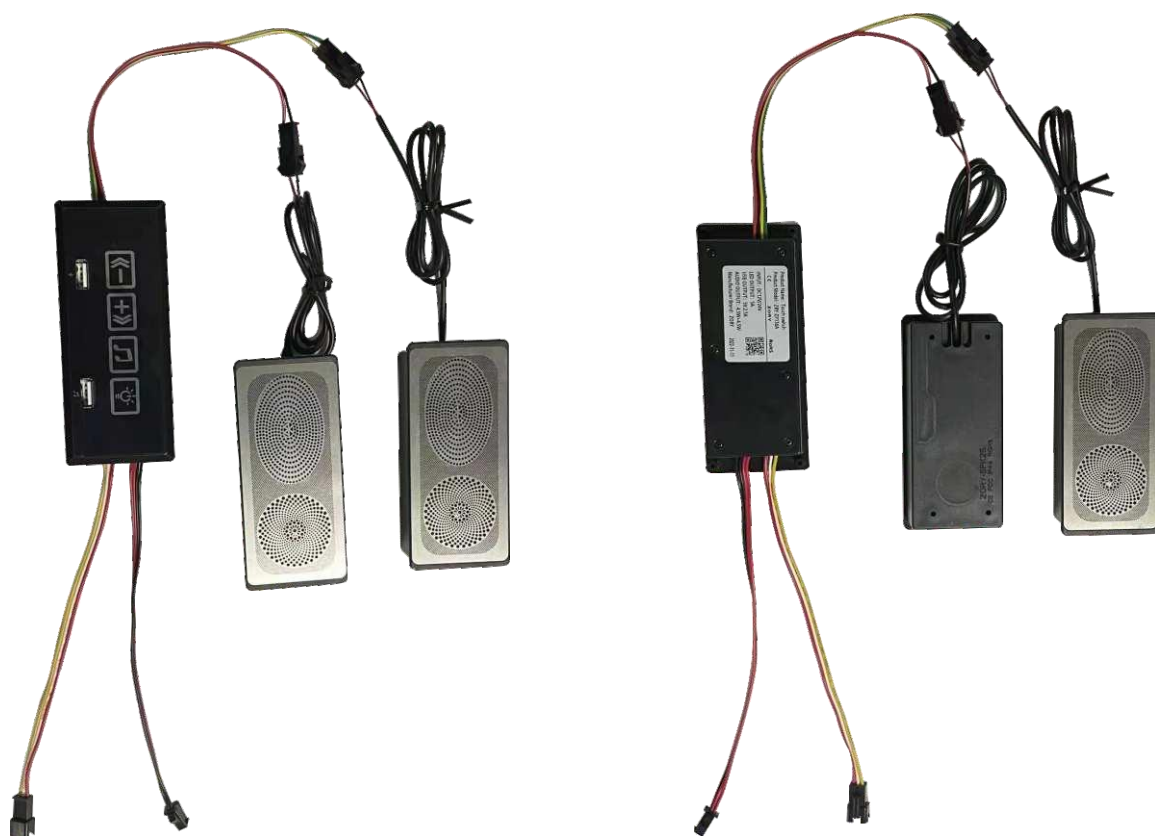


ZRY-ZP136A

4-Key + BT + USB/TF Card

Overview: Light & Bluetooth control for smart furniture and bathroom products; phone fast-charge + USB music ports; customizable keys; controls standard & colored lights, floating bed, nightstand, charging, Bluetooth; supports RGB + standard LED strips.

Bluetooth
h Series

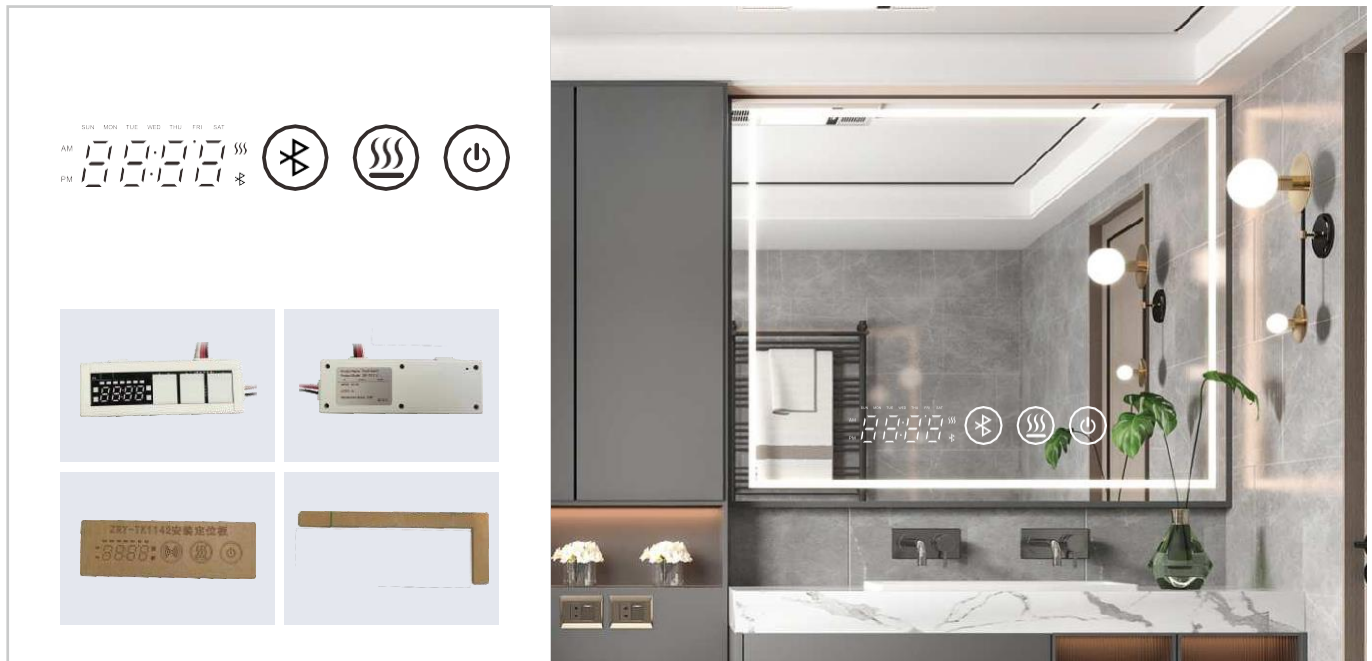


Product Size:	150×50×20mm (L×W×H)
Operating Voltage:	DC12V/DC24V
Key Backlight:	No backlight display
Max Load, 1-CH Strip:	12V-65W / 24V-130W (customizable)
Max Load, 2-CH Strip:	12V-130W / 24V-260W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	No anti-fog
Max LV Anti-Fog Load:	No anti-fog
Brightness:	5%–100%
Color Temp:	Continuous (cool→warm) / stepped (cool–neutral–warm)
Sensing:	capacitive touch;
glass	3–6mm
Optional:	1. Power-off memory

ZRY-TK1113

3-Key + Time & Temp + BT (Radar opt.)

Overview: 1-CH single-color / 2-CH dual-tri-color strips; anti-fog; time & temp; Bluetooth music; memory.



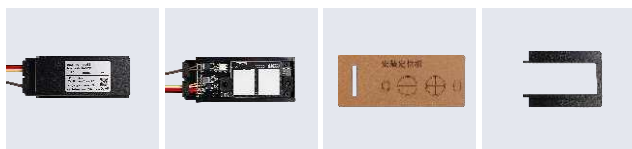
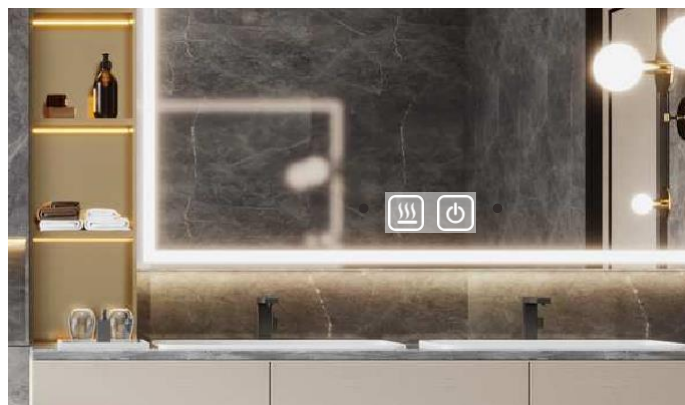
Product Size:	142×46×11mm (L×W×H)
Operating Voltage:	DC12V/DC24V
Key Backlight:	Blue standby / white on (customizable)
Time & Temp:	12H/24H; super-cap keeps running ~7 days off-grid; °C/°F
Max Load, 1-CH Strip:	12V-65W / 24V-130W (customizable)
Max Load, 2-CH Strip:	12V-130W / 24V-260W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	External Relay
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W。
Brightness:	5%–100%
Color Temp:	Continuous (cool→warm) / stepped (cool–neutral–warm)
Sensing:	capacitive touch;
glass	3–6mm
Optional:	1. Power-off memory
	2. Scheduled off / auto anti-fog off
	3. Double-click toggles light & anti-fog
	4. Fade in/out, stepless dimming & CCT; backlight blinks at limits
	5. Presence sensing
	6. Bluetooth name & password customizable (alphanumeric)
	7. ...
[Note]	
	Custom logic available; final per samples.

HX-TK5001

0/1/2-Key + IR

Overview: 1-CH single-color / 2-CH dual-tri-color strips; anti-fog; mirror-touch + presence sensing; memory.

Human
Presence



Black Housing



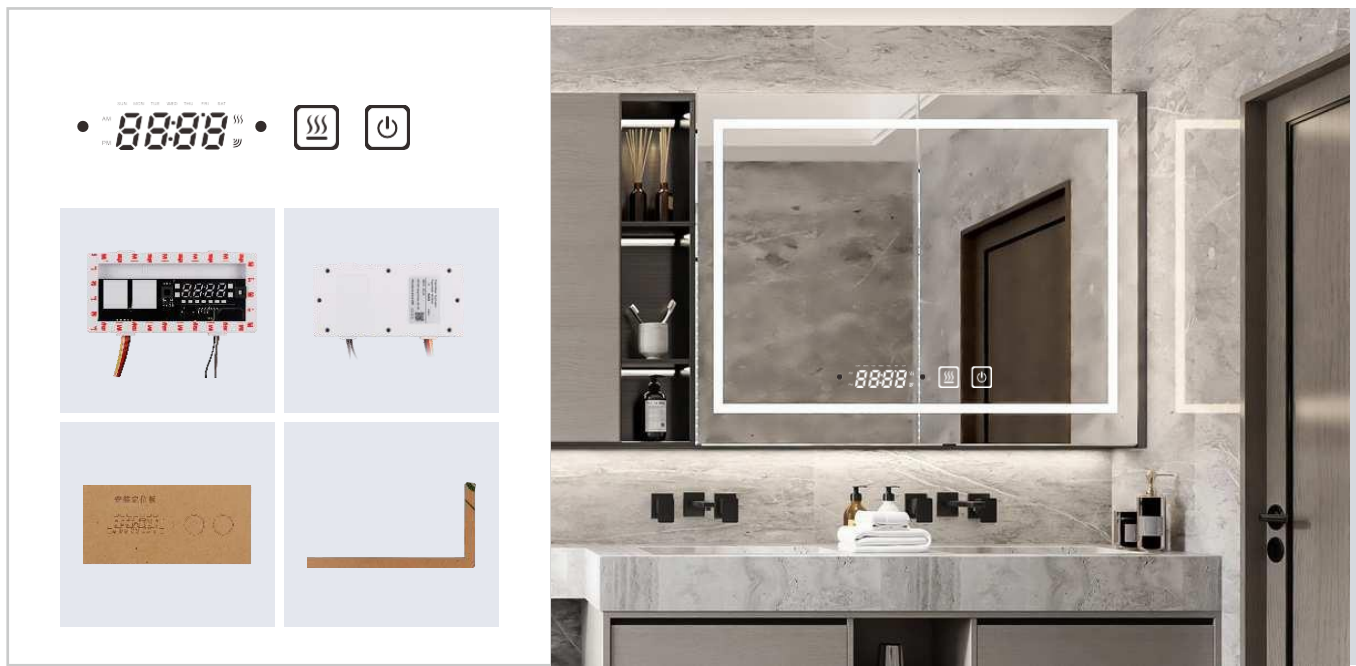
White
Housing

Product Name:	0/1/2-Key + IR
	HX-TK5001
Product Size:	119×73×10.9mm (L×W×H)
Operating Voltage:	DC12V/DC24V
Key Backlight:	Blue standby / white on (customizable)
Max Load, 1-CH Strip:	12V-65W / 24V-130W (customizable)
Max Load, 2-CH Strip:	12V-130W / 24V-260W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	AC110V-66W / AC220V-132W
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W
	(No extra relay needed; external relay optional; built-in relay drives anti-fog silently — no noise/spark/cycle limit)
Brightness:	5%–100%
Color Temp:	continuous (cool→warm) / stepped (cool–neutral–warm)
Sensing:	capacitive touch;
glass	3–6mm
Sensing:	IR on/off, 0.6–1.2 m in 4 steps;
	disable-able to mirror-touch control
Optional:	1. Power-off memory
	2. Scheduled off / auto anti-fog off
	3. Double-click toggles light & anti-fog
	4. Fade in/out, stepless dimming & CCT; backlight blinks at limits
	5. Bluetooth name & password customizable (alphanumeric)
	6. ...

HX-TK5002

2-Key + Time & Temp + IR

Overview: 1-CH single-color / 2-CH dual-tri-color strips; anti-fog; time & temp; mirror-touch + presence sensing; memory.



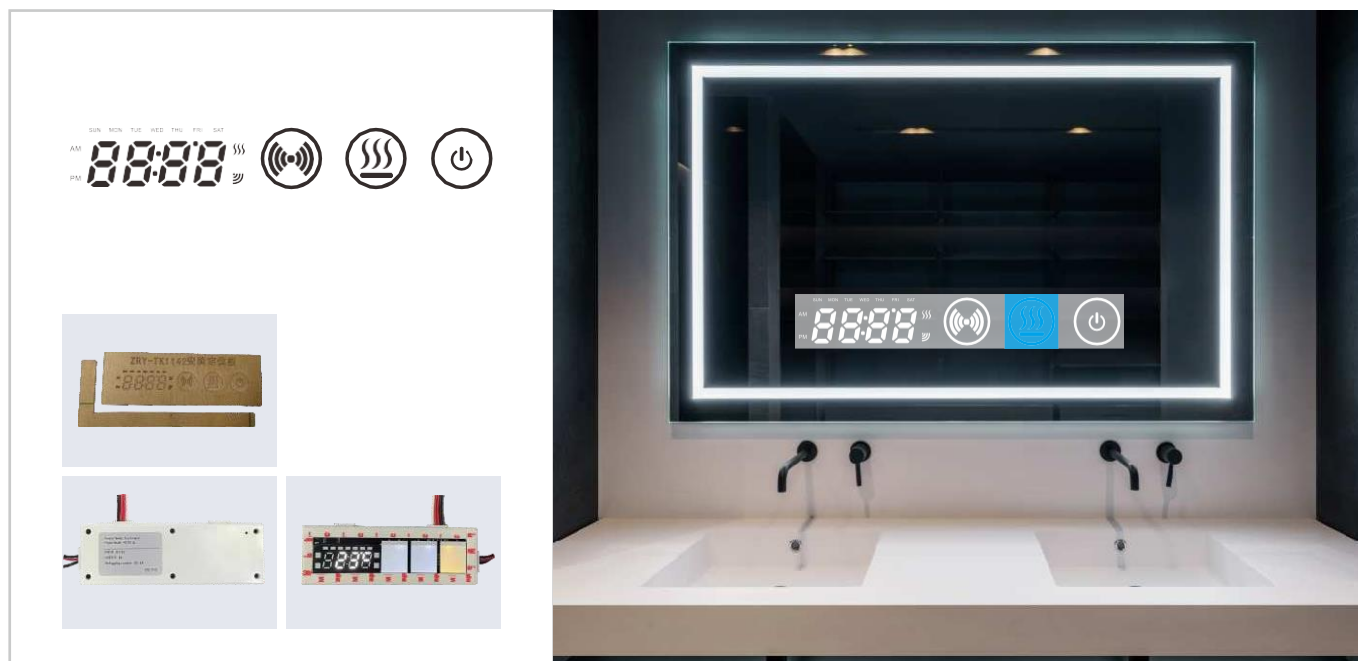
Product Name:	2-Key + Time & Temp + IR
	HX-TK5002
Product Size:	148×70×10.5mm (L×W×H)
Operating Voltage:	DC12V/DC24V
Key Backlight:	Blue standby / white on (customizable)
Time & Temp:	12H/24H, optional date; super-cap keeps running ~7 days off-grid
	°C/°F
Max Load, 1-CH Strip:	12V-65W / 24V-130W (customizable)
Max Load, 2-CH Strip:	12V-130W / 24V-260W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	AC110V-66W / AC220V-132W
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W
(No extra relay needed; external relay optional; built-in relay drives anti-fog silently — no noise/spark/cycle limit)	
Brightness:	5%–100%
Color Temp:	continuous (cool→warm) / stepped (cool–neutral–warm)
Sensing:	capacitive touch;
glass	3–6mm
	Sensing: IR on/off, 0.6–1.2 m in 4 steps; disable-able to mirror-touch control
Optional:	1. Power-off memory
	2. User-settable scheduled off / anti-fog off
	3. Double-click toggles light & anti-fog
	4. Fade in/out, stepless dimming & CCT; backlight blinks at limits
	5. Bluetooth name & password customizable (alphanumeric)
	6. ...

HX-TK1142

2-Key + Time & Temp + Radar

Overview: 1-CH single-color / 2-CH dual-tri-color strips; anti-fog; time/temp/week; mirror-touch + presence sensing.

Human
Presence



Product Size:	142×46×11mm (L×W×H)
Operating Voltage:	DC12V/DC24V
Key Backlight:	Blue standby / white on (customizable)
Time & Temp:	12H/24H, optional date; super-cap keeps running ~7 days off-grid; °C/°F
Max Load, 1-CH Strip:	12V-65W / 24V-130W (customizable)
Max Load, 2-CH Strip:	12V-130W / 24V-260W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	External Relay
Max LV Anti-Fog Load:	DC12V-36W
Brightness:	5%~100%
Color Temp:	Continuous (cool→warm) / stepped (cool-neutral-warm)
Sensing:	capacitive touch;
glass	3~6mm
Sensing:	radar on/off, 1~3 m in 4 steps; disable-able to mirror-touch control
Optional:	1. Power-off memory
	2. Pre-set auto anti-fog off for forgotten fog (default: 1h)
	3. Fade in/out, stepless dimming & CCT; backlight blinks at limits
	4. Bluetooth name & password customizable (alphanumeric)
	5. ...
[Note] Custom logic available; final per samples.	

HX-BT4010

4-Key + Display + BT + IR

Overview: 1-CH single-color / 2-CH dual-tri-color strips; anti-fog; time/date/week display; mirror-touch + presence sensing; memory.



Product Name:	4-Key + Display + IR
Model:	HX-BT6020
Product Size:	174.4×128.38×15.8mm (L×W×H, incl. bracket)
Operating Voltage:	DC12V/DC24V
Key Backlight:	White always-on (fixed)
Time & Temp:	12H/24H; super-cap keeps running ~7 days off-grid; °C/°F
Max Load, 1-CH Strip:	12V-65W / 24V-130W (customizable)
Max Load, 2-CH Strip:	12V-130W / 24V-260W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	AC110V-66W / AC220V-132W
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W
(No extra relay needed; external relay optional; built-in relay drives anti-fog silently — no noise/spark/cycle limit)	
Brightness:	5%–100%
Color Temp:	continuous (cool→warm) / stepped (cool–neutral–warm)
Sensing:	capacitive touch;
glass	3–6mm
Sensing:	IR on/off, 0.6–1.2 m in 4 steps; disable-able to mirror-touch control
	...disable-able to mirror-touch control.
Optional:	1. Power-off memory 2. User-settable scheduled off 3. Double-click toggles
	4. Fade in/out, etc. 5. BT name & password customizable (alphanumeric)
	6. Mirror-touch answer/hang-up, hands-free calls 7. FM radio / USB music
	(either) 8. Black/blue screen
	9. Multiple speaker sizes — see speaker spec 10. ...
[Note] Custom logic available; final per samples.	

HX-BT6020

6-Key + Display + BT + IR

Overview: 1-CH single-color / 2-CH dual-tri-color strips; anti-fog; time/date/week display; mirror-touch + presence sensing; memory.

Human
Presence

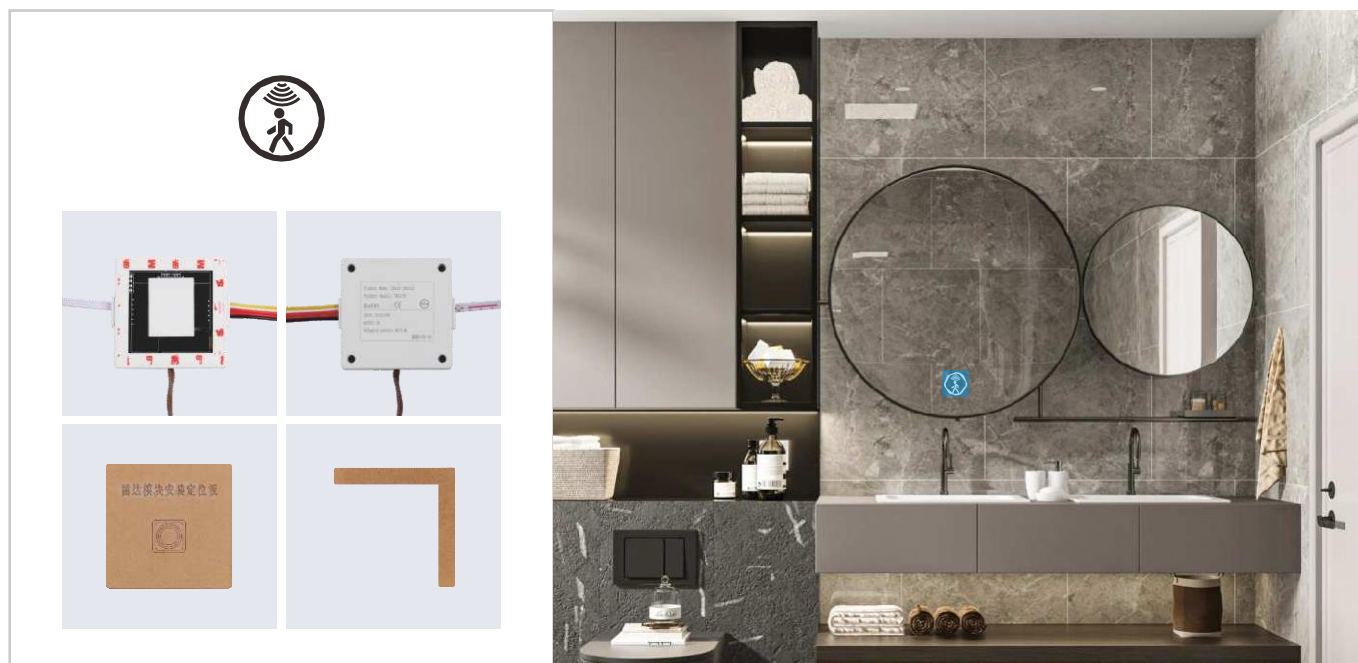


Product Name:	6-Key + Display + IR
	HX-BT6020
Product Size:	174.4×128.38×15.8mm (L×W×H, incl. bracket)
Operating Voltage:	DC12V/DC24V
Key Backlight:	White always-on (fixed)
Time & Temp:	12H/24H; super-cap keeps running ~7 days off-grid; °C/°F
Max Load, 1-CH Strip:	12V-65W / 24V-130W (customizable)
Max Load, 2-CH Strip:	12V-130W / 24V-260W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	AC110V-66W / AC220V-132W
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W
(No extra relay needed; external relay optional; built-in relay drives anti-fog silently — no noise/spark/cycle limit)	
Brightness:	5%–100%
Color Temp:	continuous (cool→warm) / stepped (cool–neutral–warm)
Sensing:	capacitive touch;
glass	3–6mm
Sensing:	IR on/off, 0.6–1.2 m in 4 steps; sensing
	...can be disabled to switch to mirror-touch control.
Optional:	1. Power-off memory 2. User-settable scheduled off 3. Double-click toggles
	4. Fade in/out, etc. 5. BT name & password customizable (alphanumeric)
	6. Mirror-touch answer/hang-up, hands-free calls 7. FM radio / USB music
	(either)
	8. Black/blue screen 9. Multiple speaker sizes — see speaker spec 10. ...

ZRY-LA4230

0-Key + Radar Sensing + Hand-Wave

Overview: 1-CH single-color strip; anti-fog; radar presence + hand-wave on/off; memory; ideal for mirror cabinets.



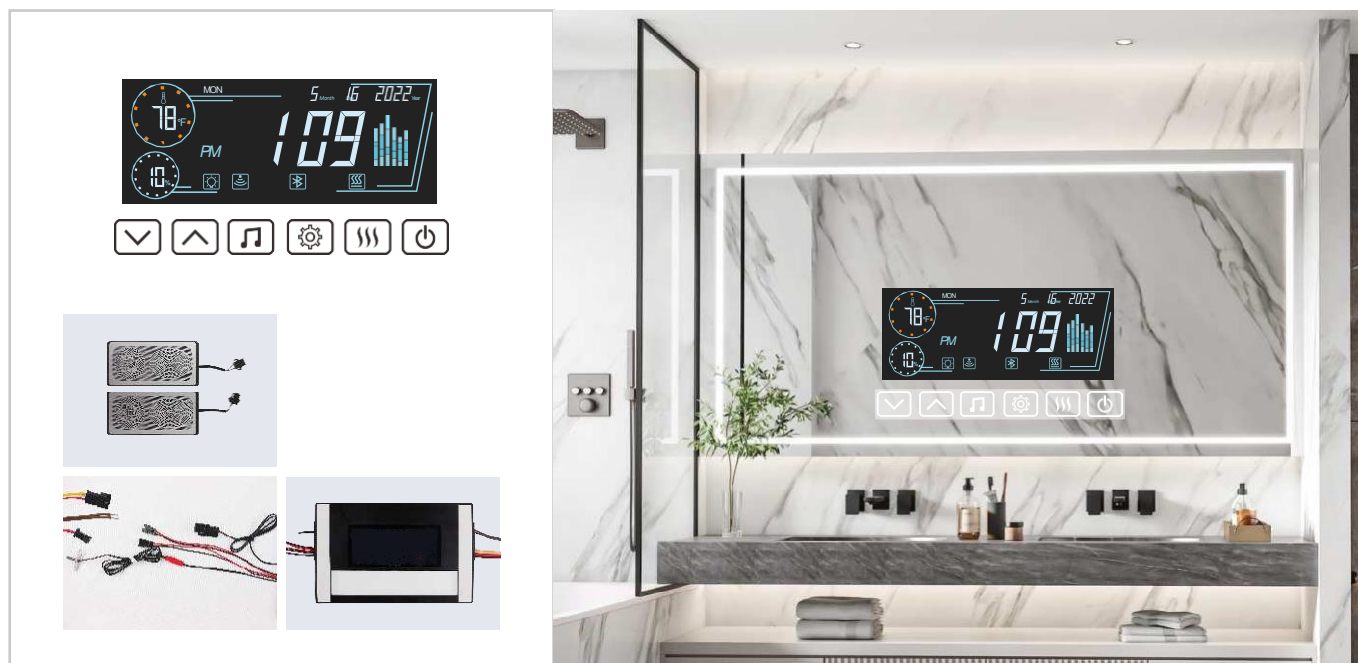
Product Name:	0-Key + Radar Sensing + Hand-Wave
	ZRY-LA4230
Product Size:	60×60×10.5mm (L×W×H)
Operating Voltage:	DC12V/DC24V
Key Backlight:	Blue standby / white on (customizable)
Max Load, 1-CH Strip:	12V-65W, 24V-130W
Max Load, 2-CH Strip:	N/A
Max HV Anti-Fog Load:	AC110V-66W / AC220V-132W
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W
(No extra relay needed; external relay optional; built-in relay drives anti-fog silently — no noise/spark/cycle limit)	
Brightness:	N/A
Color Temp:	N/A
Principle:	radar (microwave) sensing;
glass	3–6mm
Sensing:	radar on/off, 1–3 m adjustable
Optional:	1. Power-off memory
	2. Auto-off timing customizable
	3. Radar range pre-set at factory
	4. ...

ZRY-BA7126

Ultra-Thin 6-Key + Display + BT + Radar

Overview: 1-CH single-color / 2-CH dual-tri-color strips; anti-fog; time/date/week display; mirror-touch + presence sensing; memory.

Human
Presence

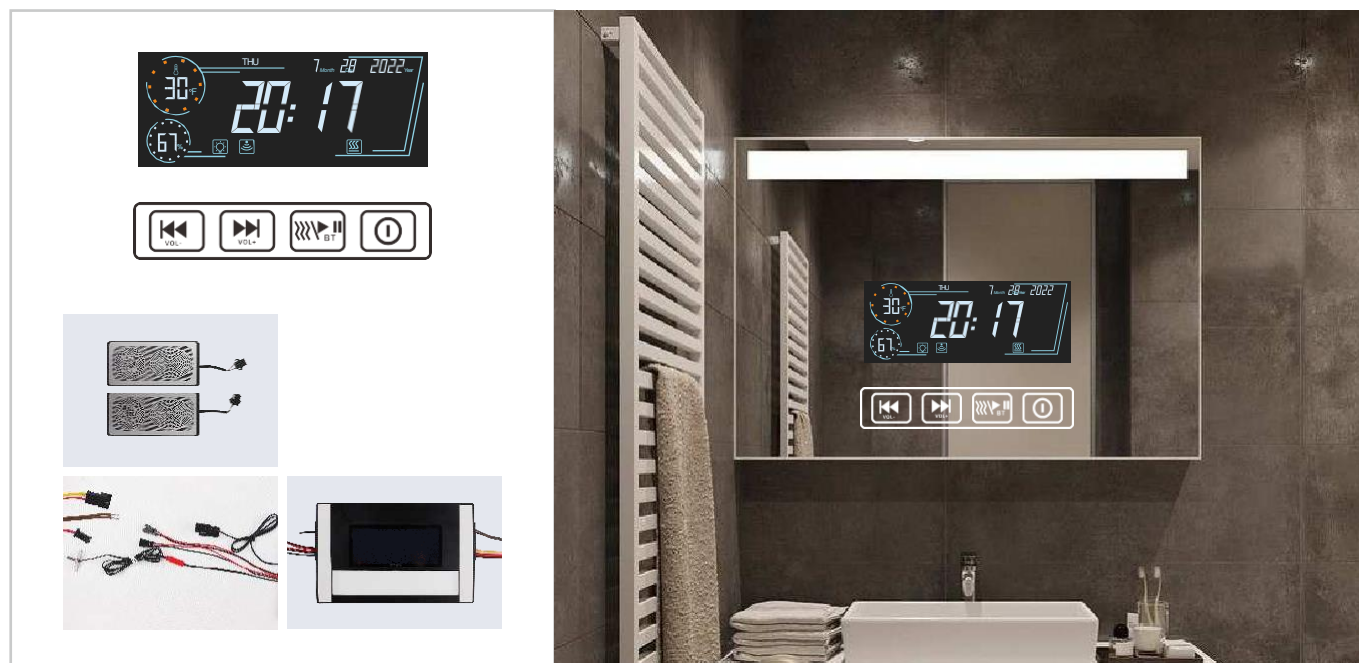


Product Name:	Ultra-Thin 6-Key + Display + BT + Radar
	ZRY-BA7126
Product Size:	166.3×104.3×10mm (L×W×H)
Operating Voltage:	DC12V/DC24V
Key Backlight:	White always-on (fixed)
Time & Temp:	12H/24H; super-cap keeps running ~7 days off-grid; °C/°F
Max Load, 1-CH Strip:	12V-65W / 24V-130W (customizable)
Max Load, 2-CH Strip:	12V-130W / 24V-260W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	AC110V-66W / AC220V-132W
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W
(No extra relay needed; external relay optional; built-in relay drives anti-fog silently — no noise/spark/cycle limit)	
Brightness:	5%–100%
Color Temp:	continuous (cool→warm) / stepped (cool–neutral–warm)
Sensing:	capacitive touch;
glass	3–6mm
Sensing:	radar (microwave) on/off, 1–3 m in 4 steps; disable-able to mirror-touch control
Optional:	1. Power-off memory 2. User-settable scheduled off 3. Double-click toggles
	4. Fade in/out, etc. 5. BT name & password customizable (alphanumeric)
	6. Mirror-touch answer/hang-up, hands-free calls 7. FM radio / USB music (either)
	8. Black/blue screen 9. Multiple speaker sizes — see speaker spec 10. ...

ZRY-BA7124

Ultra-Thin 4-Key + Display + BT + Radar

Overview: 1-CH single-color / 2-CH dual-tri-color strips; anti-fog; time/date/week display; mirror-touch + presence sensing; memory.



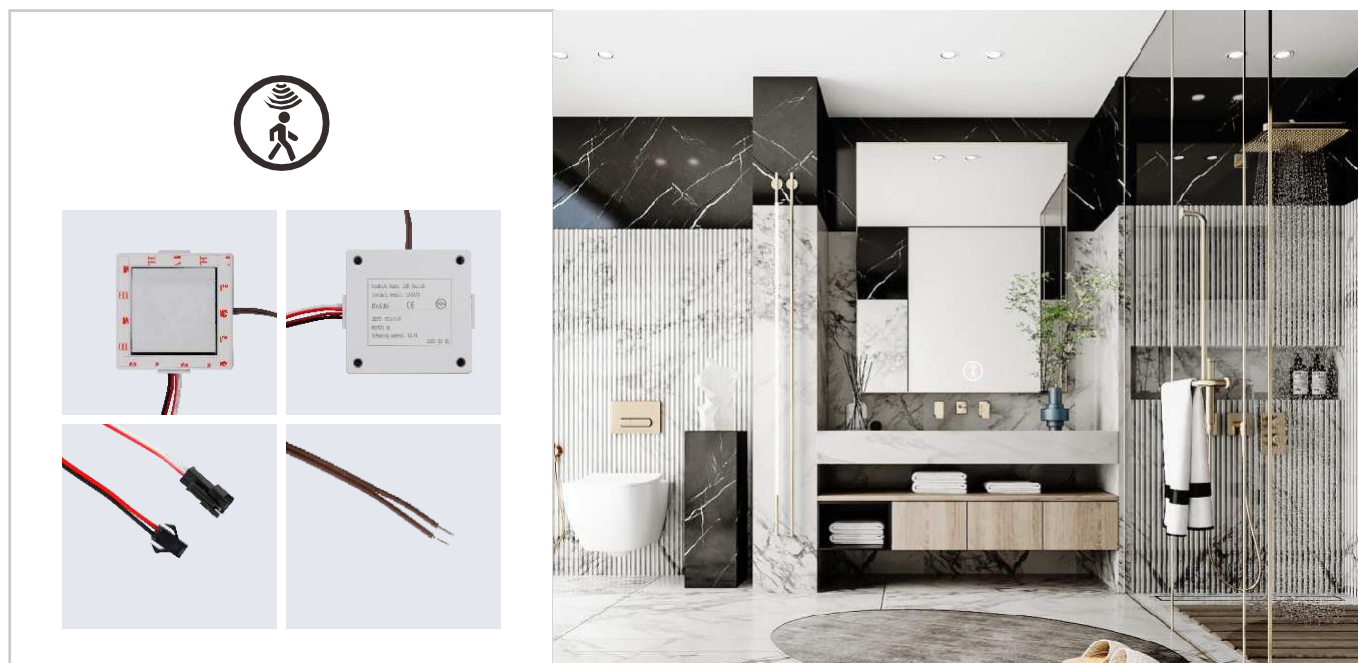
Model:	ZRY-BA7126
Product Size:	166.3×104.3×10mm (L×W×H)
Operating Voltage:	DC12V/DC24V
Key Backlight:	White always-on (fixed)
Time & Temp:	12H/24H; super-cap keeps running ~7 days off-grid; °C/°F
Max Load, 1-CH Strip:	12V-65W / 24V-130W (customizable)
Max Load, 2-CH Strip:	12V-130W / 24V-260W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	AC110V-66W / AC220V-132W
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W
(No extra relay needed; external relay optional; built-in relay drives anti-fog silently — no noise/spark/cycle limit)	
Brightness:	5%–100%
Color Temp:	continuous (cool→warm) / stepped (cool–neutral–warm)
Sensing:	capacitive touch;
Glass	3–6mm
Sensing: radar (microwave) on/off, 1–3 m in 4 steps; disable-able to mirror-touch control	
...disable-able to mirror-touch control.	
Optional:	1. Power-off memory 2. User-settable scheduled off 3. Double-click toggles
	4. Fade in/out, etc. 5. BT name & password customizable (alphanumeric)
	6. Mirror-touch answer/hang-up, hands-free calls 7. FM radio / USB music
	(either)
	8. Black/blue screen 9. Multiple speaker sizes — see speaker spec 10. ...

ZRY-LA4240

0-Key Radar Sensing Switch

Overview: 1-CH single-color strip; anti-fog; radar presence on/off; memory.

Human
Presence

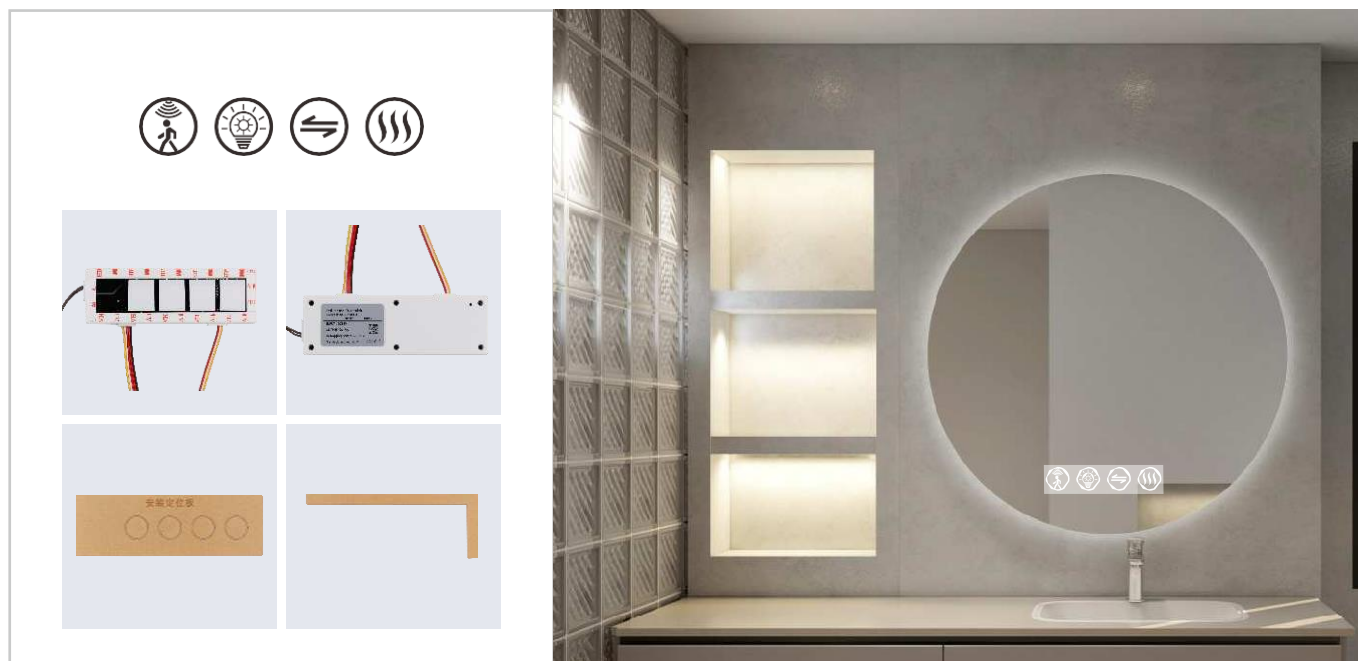


Product Name:	0-Key Radar Sensing Switch
Model:	ZRY-LA4240
Product Size:	60×60×10.5mm (L×W×H)
Operating Voltage:	DC12V/DC24V
Key Backlight:	Blue standby / white on (customizable)
Max Load, 1-CH Strip:	12V-65W, 24V-130W
Max Load, 2-CH Strip:	N/A
Max HV Anti-Fog Load:	AC110V-66W / AC220V-132W
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W
(No extra relay needed; external relay optional; built-in relay drives anti-fog silently — no noise/spark/cycle limit)	
Brightness:	N/A
Color Temp:	N/A
Principle:	radar (microwave) sensing;
glass	3–6mm
Sensing:	radar on/off, 1–3 m adjustable
Optional:	1. Power-off memory
	2. Auto-off timing customizable
	3. Radar range pre-set at factory
	4. ...

ZRY-TK1243

Micro-Motion Radar

Overview: 1-CH single-color / 2-CH dual-tri-color strips; anti-fog; mirror-touch + presence sensing; memory.



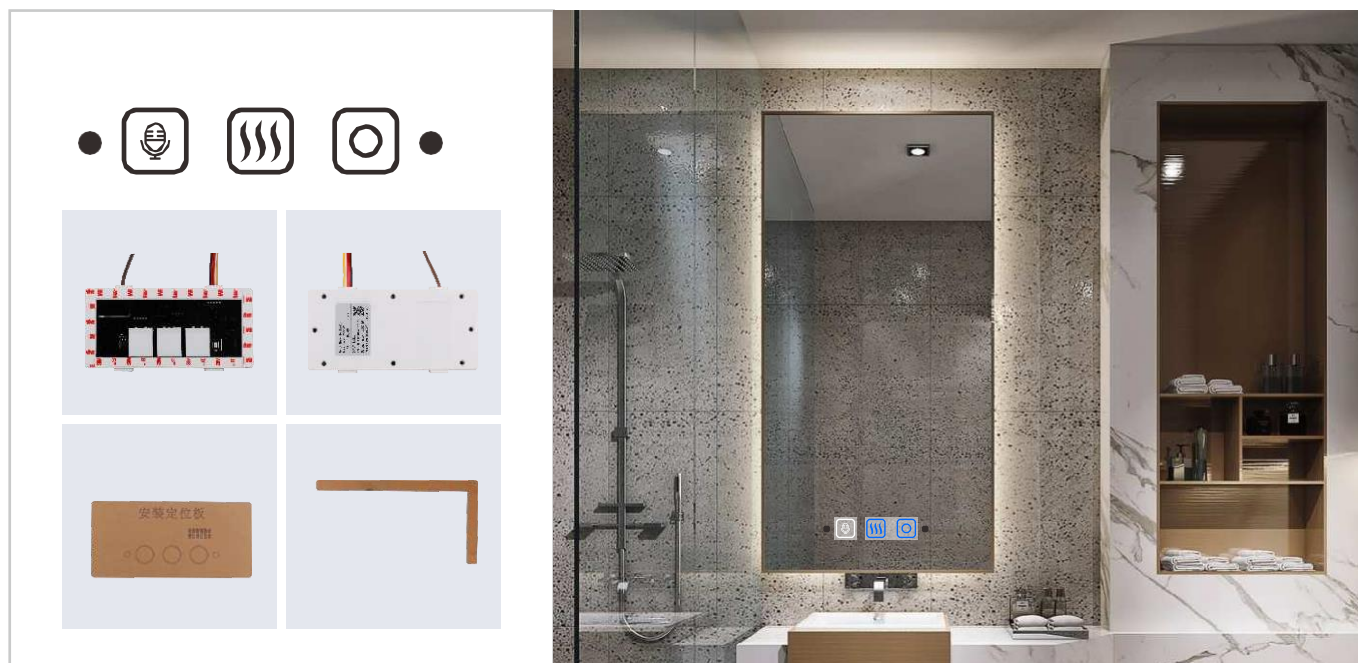
Product Name:	Micro-Motion Radar
Model:	ZRY-TK1243
Product Size:	142×48×11mm (L×W×H)
Operating Voltage:	DC12V/DC24V
Key Backlight:	Blue standby / white on (customizable)
Max Load, 1-CH Strip:	12V-65W / 24V-130W (customizable)
Max Load, 2-CH Strip:	12V-130W / 24V-260W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	AC110V-66W / AC220V-132W
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W
(No extra relay needed; external relay optional; built-in relay drives anti-fog silently — no noise/spark/cycle limit)	
Brightness:	5%–100%
Color Temp:	continuous (cool→warm) / stepped (cool–neutral–warm)
Sensing:	capacitive touch;
glass	3–6mm
Sensing:	radar (microwave) on/off, 1–3 m in 4 steps;
	disable-able to mirror-touch control
Optional:	1. Power-off memory
	2. Scheduled off / auto anti-fog off
	3. Fade in/out, stepless dimming & CCT; backlight blinks at limits
	4. 1/2/3-key radar versions; 3-key radar controls two strips (main + sub)
	5. Bluetooth name & password customizable (alphanumeric)

HX-TK5005

0/2-Key + Offline Voice + IR/Radar

Overview: 1-CH single-color / 2-CH dual-tri-color strips; anti-fog; mirror-touch + IR/radar sensing; offline voice control; memory.

Human
Presence

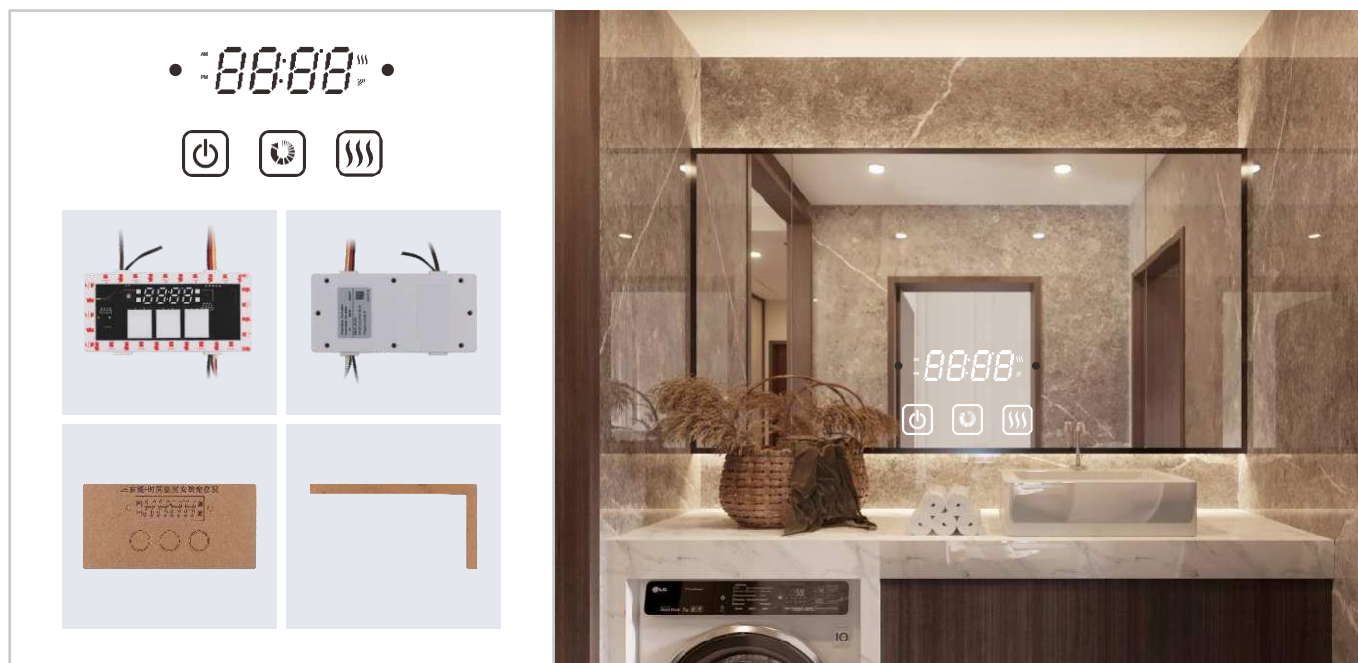


Product Name:	0/2-Key + Offline Voice + IR/Radar
	HX-TK5005
Product Size:	148×70×10.5mm (L×W×H)
Operating Voltage:	DC12V/DC24V
Key Backlight:	Blue standby / white on (customizable)
Max Load, 1-CH Strip:	12V-65W / 24V-130W (customizable)
Max Load, 2-CH Strip:	12V-130W / 24V-260W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	AC110V-66W / AC220V-132W
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W
(No extra relay needed; external relay optional; built-in relay drives anti-fog silently — no noise/spark/cycle limit)	
Brightness:	5%–100%
Color Temp:	continuous (cool→warm) / stepped (cool–neutral–warm)
Sensing:	capacitive touch;
glass	3–6mm
Sensing:	radar (microwave) on/off, 1–3 m in 4 steps;
	disable-able to mirror-touch control
Optional:	1. Power-off memory
	2. Scheduled off / auto anti-fog off
	3. Fade in/out, stepless dimming & CCT; backlight blinks at limits
	4. Bluetooth name & password customizable (alphanumeric)
	5. English version optional
	6. ...

ATA-LMS03A

3-Key + Time & Temp + Sensing

Overview: 1-CH single-color / 2-CH dual-tri-color strips; anti-fog; time & temp; memory.



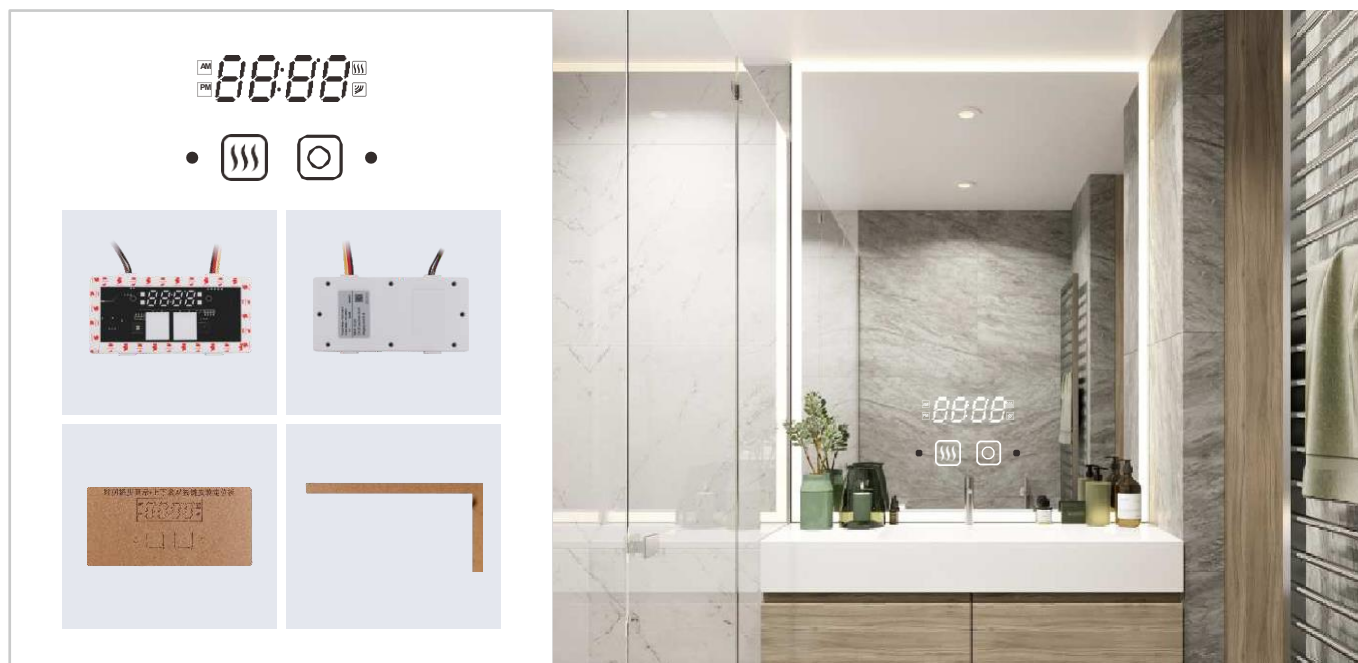
Product Name:	3-Key + Time & Temp + Sensing
	ATA-LMS03A
Product Size:	148×70×10.5mm (L×W×H)
Operating Voltage:	DC12V/DC24V
Key Backlight:	Blue standby / white on (customizable)
Time & Temp:	12H/24H; super-cap keeps running ~7 days off-grid; °C/°F
Max Load, 1-CH Strip:	12V-65W / 24V-130W (customizable)
Max Load, 2-CH Strip:	12V-130W / 24V-260W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	AC110V-66W / AC220V-132W
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W
(No extra relay needed; external relay optional; built-in relay drives anti-fog silently — no noise/spark/cycle limit)	
Brightness:	5%–100%
Color Temp:	continuous (cool→warm) / stepped (cool–neutral–warm)
Sensing:	capacitive touch;
Glass	3–6mm
Optional:	1. Power-off memory
	2. Scheduled off / auto anti-fog off
	3. Double-click toggles light & anti-fog
	4. Fade in/out, stepless dimming & CCT; backlight blinks at limits
	5. Bluetooth name & password customizable (alphanumeric)
	6. ...

ATA-LMS02A

2-Key + Time & Temp + Sensing

Overview: 1-CH single-color / 2-CH dual-tri-color strips; anti-fog; time & temp; memory.

Human
Presence

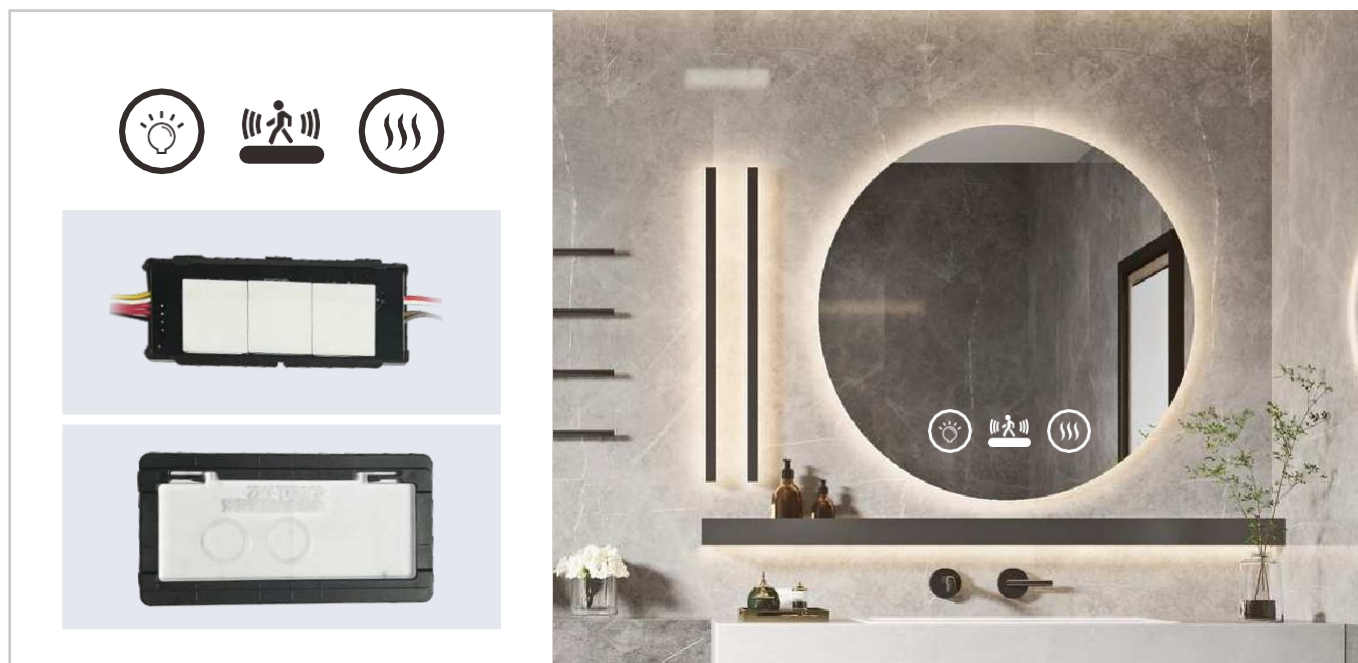


Product Name:	2-Key + Time & Temp + Sensing
Model:	ATA-LMS02A
Product Size:	148×70×10.5mm (L×W×H)
Operating Voltage:	DC12V/DC24V
Key Backlight:	Blue standby / white on (customizable)
Time & Temp:	12H/24H; super-cap keeps running ~7 days off-grid; °C/°F
Max Load, 1-CH Strip:	12V-65W / 24V-130W (customizable)
Max Load, 2-CH Strip:	12V-130W / 24V-260W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	AC110V-66W / AC220V-132W
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W
(No extra relay needed; external relay optional; built-in relay drives anti-fog silently — no noise/spark/cycle limit)	
Brightness:	5%–100%
Color Temp:	continuous (cool→warm) / stepped (cool–neutral–warm)
(External-relay version: built-in relay drives anti-fog silently — no noise/spark/cycle limit).	
Sensing:	capacitive touch
Glass:	3–6mm.
Optional:	1. Power-off memory
	2. Scheduled off / auto anti-fog off
	3. Double-click toggles light & anti-fog
	4. Fade in/out, stepless dimming & CCT; backlight blinks at limits
	5. Bluetooth name & password customizable (alphanumeric)
	6. ...

ZRY-TK82C2

2-Key + Radar

Overview: 1-CH single-color / 2-CH dual-tri-color strips; anti-fog; radar presence on/off (disable-able, range adjustable); memory.



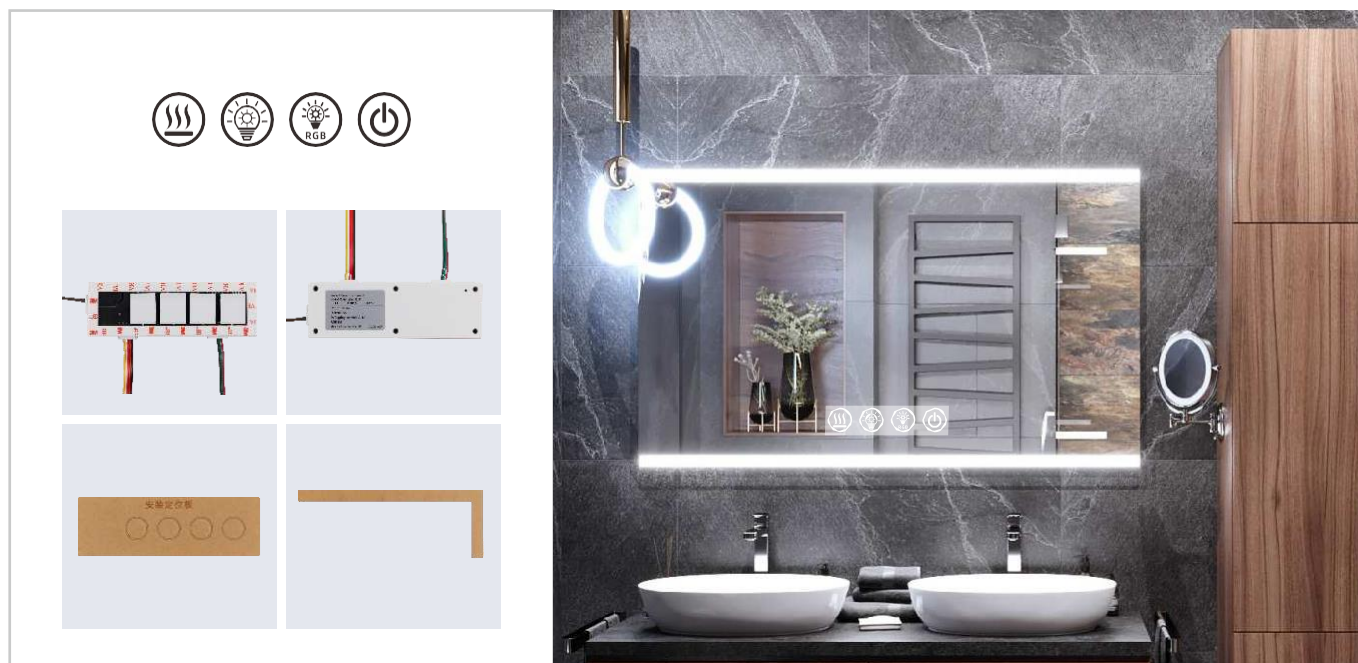
Product Size:	118×64×7mm (L×W×H)
Operating Voltage:	DC12V/DC24V
Key Backlight:	Blue standby / white on (customizable)
Max Load, 1-CH Strip:	12V-65W / 24V-130W (customizable)
Max Load, 2-CH Strip:	12V-130W / 24V-260W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	AC110V-66W / AC220V-132W
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W
(No extra relay needed; external relay optional; built-in relay drives anti-fog silently — no noise/spark/cycle limit)	
Brightness:	5%–100%
Color Temp:	continuous (cool→warm) / stepped (cool–neutral–warm)
Sensing:	capacitive touch;
glass	3–6mm
Sensing:	radar on/off, 1–3 m adjustable; disable-able to manual control; 4-step range
Optional:	
1. Power-off memory	
2. Scheduled off / auto anti-fog off	
3. Double-click toggles light & anti-fog	
4. Bluetooth name & password customizable (alphanumeric)	
5. ...	
[Note]	
Custom logic available; final per samples.	

HX-TK1304

1/2/3/4-Key RGB + Standard Strip Combo

Overview: 1/2/3/4-key free combos; controls two strip channels (standard: 1-CH single-color).

Other
Models

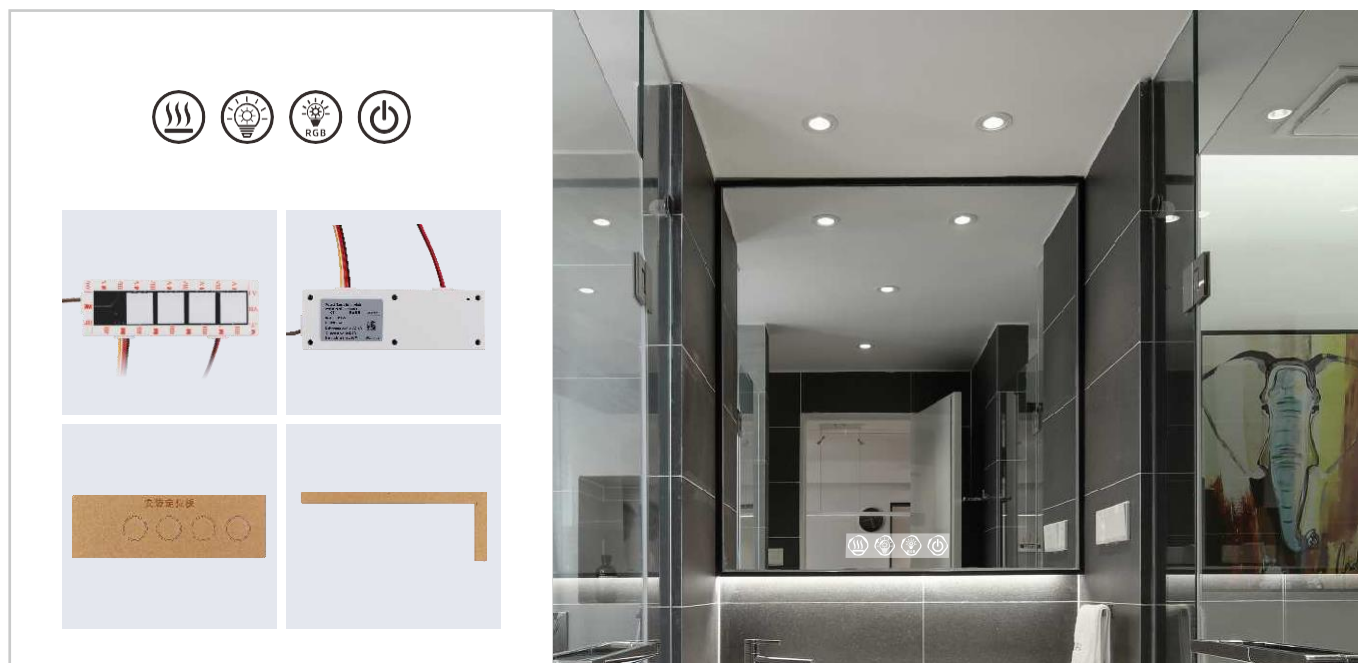


Product Name:	1/4-Key RGB + Standard Strip Combo
	HX-TK1304
Product Size:	142×48×11mm (L×W×H)
Operating Voltage:	DC12V/DC24V
Key Backlight:	Blue standby / white on (customizable)
Max Load, 1-CH Strip:	12V-65W / 24V-130W (customizable)
Max Load, 2-CH Strip:	12V-130W / 24V-260W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	AC110V-66W / AC220V-132W
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W
(No extra relay needed; external relay optional; built-in relay drives anti-fog silently — no noise/spark/cycle limit)	
Brightness:	5%–100%
Color Temp:	continuous (cool→warm) / stepped (cool–neutral–warm)
Sensing:	capacitive touch;
glass	3–6mm
	2-CH dual/tri-color strips; RGB strips: dynamic combos (colorful, red, yellow, green, cyan, blue, purple);
	hi/lo-voltage anti-fog; memory.
Optional:	1. Power-off memory
	2. Scheduled off / auto anti-fog off
	3. Double-click toggles light & anti-fog
	4. Fade in/out, stepless dimming & CCT; backlight blinks at limits
	5. Bluetooth name & password customizable (alphanumeric)
	6. ...

HX-TK1004

1/2/3/4-Key + Buzzer

Overview: 1-CH single-color / 2-CH dual-tri-color strips; anti-fog; buzzer (beep on touch); memory.



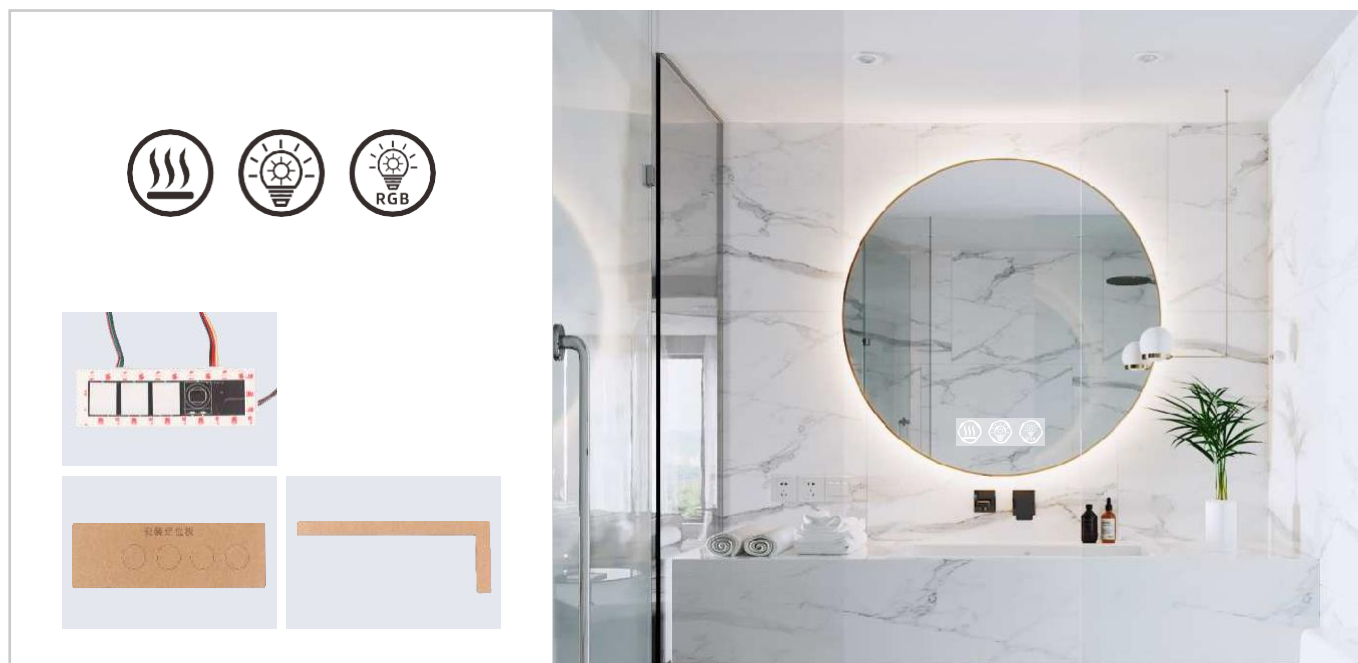
Model:	HX-TK1004
Product Size:	142×48×11mm (L×W×H)
Operating Voltage:	DC12V/DC24V
Key Backlight:	Blue standby / white on (customizable)
Max Load, 1-CH Strip:	12V-65W / 24V-130W (customizable)
Max Load, 2-CH Strip:	12V-130W / 24V-260W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	AC110V-66W / AC220V-132W
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W
(No extra relay needed; external relay optional; built-in relay drives anti-fog silently — no noise/spark/cycle limit)	
Brightness:	5%–100%
Color Temp:	continuous (cool→warm) / stepped (cool–neutral–warm)
Sensing:	capacitive touch;
glass	3–6mm
Optional:	1. Power-off memory
	2. Scheduled off / auto anti-fog off
	3. Double-click toggles light & anti-fog
	4. Fade in/out, stepless dimming & CCT; backlight blinks at limits
	5. Bluetooth name & password customizable (alphanumeric);
	BT and buzzer are mutually exclusive
	6. ...

ZRY-TK1353

2/3-Key Standard LED + RGB Strip Combo

Overview: 1-CH single-color / 2-CH dual-tri-color strips + RGB strips (multi-color combos); anti-fog; memory.

Other
Models



Product Name:	2/3-Key Standard LED + RGB Strip Combo
	ZRY-TK1353
Product Size:	142×48×11mm (L×W×H)
Operating Voltage:	DC12V/DC24V
Key Backlight:	Blue standby / white on (customizable)
Max Load, 1-CH Strip:	12V-65W / 24V-130W (customizable)
Max Load, 2-CH Strip:	12V-130W / 24V-260W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	AC110V-66W / AC220V-132W
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W
(No extra relay needed; external relay optional; built-in relay drives anti-fog silently — no noise/spark/cycle limit)	
Brightness:	5%–100%
Color Temp:	stepless (cool→warm) / stepped (cool–neutral–warm)
Sensing:	capacitive touch;
glass	3–6mm
Optional:	1. Power-off memory
	2. Scheduled off / auto anti-fog off
	3. Double-click toggles light & anti-fog
	4. Fade in/out, stepless dimming & CCT; backlight blinks at limits
	5. Bluetooth name & password customizable (alphanumeric)
	6. 3-key: three dual-color strips + anti-fog
	7. 3-key: two dual-color strips + RGB strip + anti-fog
	8. 2-key: three dual-color strips + RGB strip + anti-fog
	9. ...

ZRY-TK4301

1-Key RGB or 1-Key Single/Dual-Color Flowing Strip

Overview: RGB strips (multi-color combos: red/yellow/green/cyan/blue/purple) or 1-CH single-color / 2-CH dual-color flowing strips; anti-fog (on with light); memory.

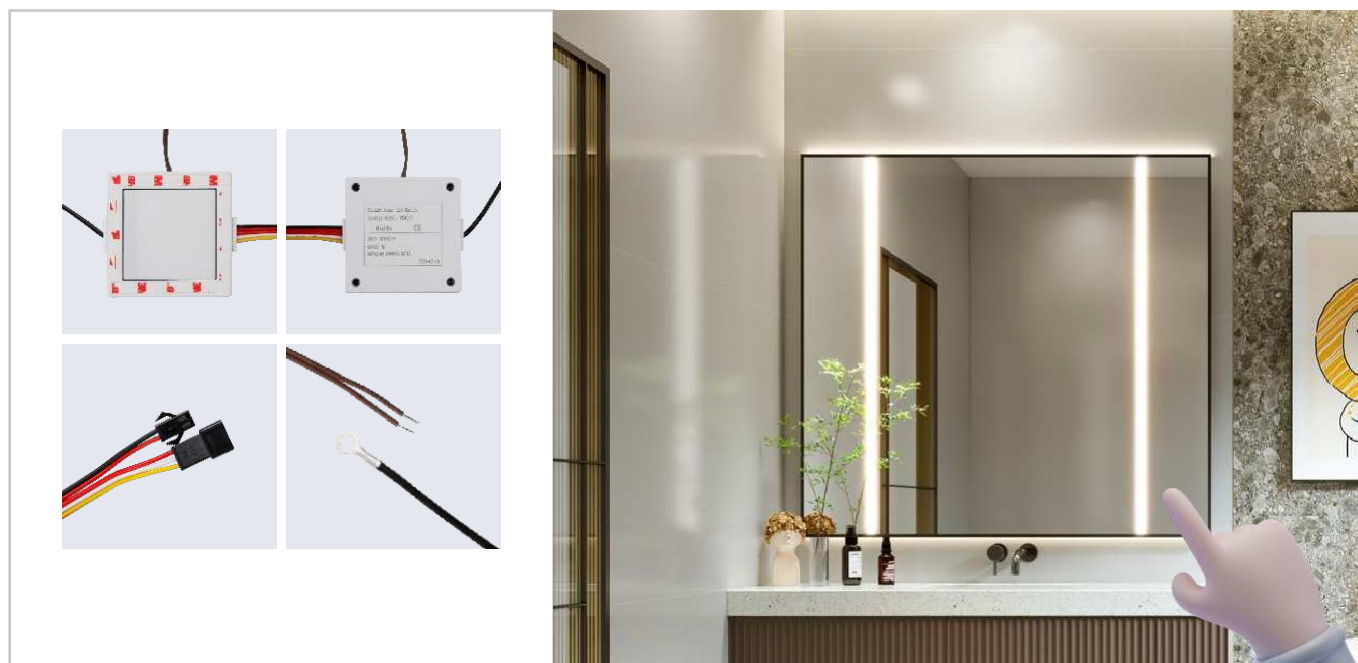


Product Name:	1-Key RGB or 1-Key Single/Dual-Color Flowing Strip
	ZRY-TK4301
Product Size:	60×60×10.5mm (L×W×H)
Operating Voltage:	DC12V/DC24V
Key Backlight:	Blue standby / white on (customizable)
Max Load, 1-CH Strip:	12V-65W / 24V-130W (customizable)
Max Load, 2-CH Strip:	12V-130W / 24V-260W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	AC110V-66W / AC220V-132W
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W
(No extra relay needed; external relay optional; built-in relay drives anti-fog silently — no noise/spark/cycle limit)	
Brightness:	5%–100%
Color Temp:	stepless (cool→warm) / stepped (cool–neutral–warm)
Sensing:	capacitive touch;
glass	3–6mm
Optional:	1. Power-off memory
	2. Scheduled off / auto anti-fog off
	3. Double-click toggles light & anti-fog
	4. Fade in/out, stepless dimming & CCT; backlight blinks at limits
	5. Bluetooth name & password customizable (alphanumeric)
	6. ...

HX-TK4603

Keyless Metal Touch Switch

Overview: Touch small metal/conductor surfaces to control 1-CH single-color / 2-CH dual-tri-color strips; anti-fog (on with light); memory.

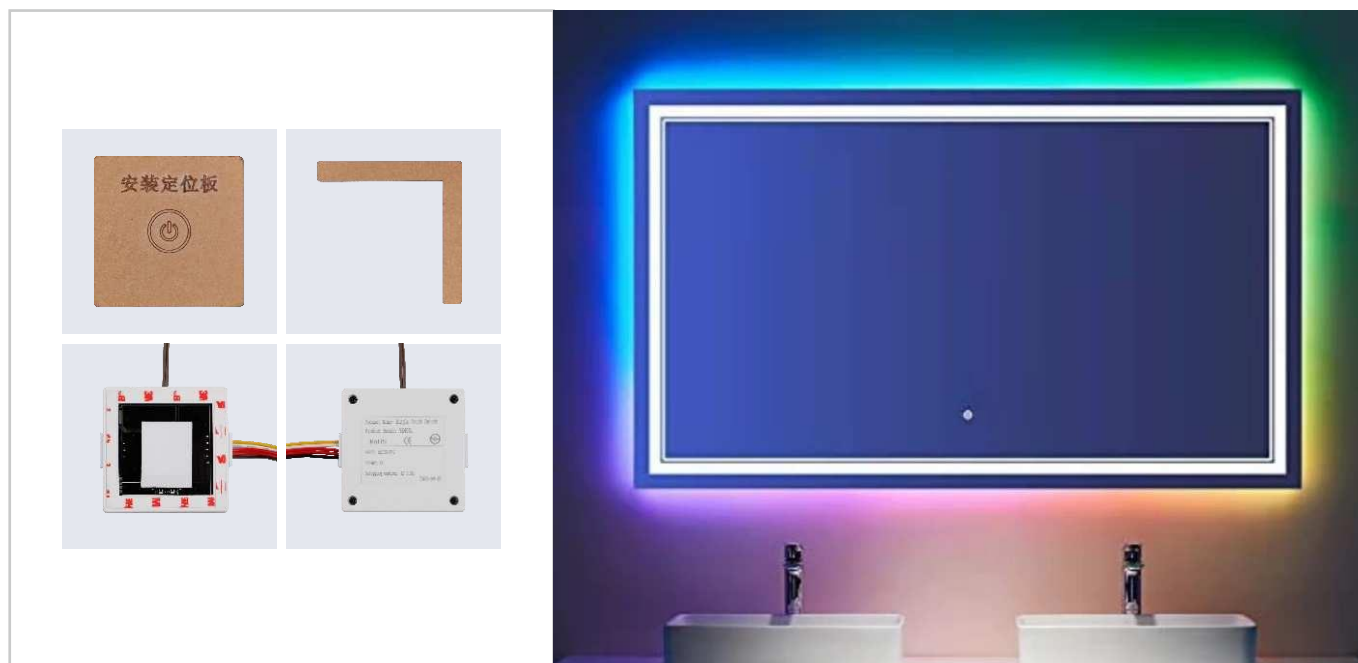


Product Name:	Keyless Metal Touch Switch
	HX-TK4603
Product Size:	60×60×10.5mm (L×W×H)
Operating Voltage:	DC12V/DC24V
Key Backlight:	No keys, no backlight
Max Load, 1-CH Strip:	12V-65W / 24V-130W (customizable)
Max Load, 2-CH Strip:	12V-130W / 24V-260W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	AC110V-66W / AC220V-132W
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W
(No extra relay needed; external relay optional; built-in relay drives anti-fog silently — no noise/spark/cycle limit)	
Brightness:	5%–100%
Color Temp:	stepless (cool→warm) / stepped (cool–neutral–warm)
Sensing:	touch on metal or conductor surface
Optional:	1. Power-off memory
	2. Scheduled off / auto anti-fog off
	3. Fade in/out, etc.
	4. Bluetooth name & password customizable (alphanumeric)
	5. ...

ZRY-TK4301

1-Key RGB or 1-Key Single/Dual-Color Flowing Strip

Overview: RGB strips (multi-color combos: red/yellow/green/cyan/blue/purple) or 1-CH single-color / 2-CH dual-color flowing strips; anti-fog (on with light); memory.



Other
Models

Product Size:	150×100×10.9mm (L×W×H, incl. bracket)
Operating Voltage:	DC12V/DC24V (subject to sample)
Key Backlight:	LCD white always-on (see photos)
Max Load, 1-CH Strip:	12V-65W / 24V-130W (subject to sample)
Max Load, 2-CH Strip:	12V-130W / 24V-260W (subject to sample)
Max HV Anti-Fog Load:	External Relay
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W (subject to sample)
Brightness:	5%–100%
Color Temp:	Continuous (cool→warm) / stepped (cool–neutral–warm)
Sensing:	capacitive touch;
glass	3–6mm
Overview:	one key controls tri-color strip on/off, brightness & CCT; one key controls anti-fog;
	Wi-Fi auto-updates local time/temp/date/humidity/wind/PM2.5
Optional:	customizable per customer
[Note] Custom logic available; final per samples.	

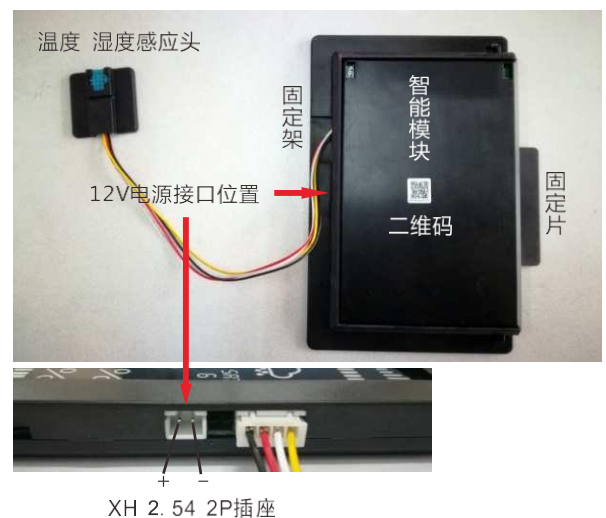
Wi-Fi Weather Module



Product Preview

Diagram of the display panel layout

- 1) Time display
- 2) Weather forecast shows
(Sunny - cloudy - rainy - snowy)
- 3) Week, date display
- 4) Indoor and outdoor temperature and humidity display
- 5) Ultraviolet Display
(L Weak, M Medium, H High)
- 6) PM 2.5 value display
- 7) Signal strength
- 8) Battery



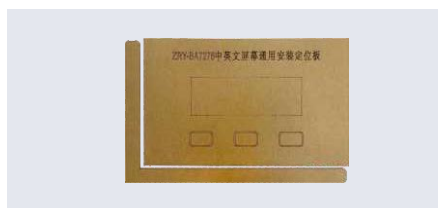
Technical specifications	
Product name:	Ultra-thin intelligent weather module
Appearance dimensions:	106×158×14mm
Power:	5W
Operating voltage:	DC 12V
Indoor temperature error:	±1°C
Indoor humidity error:	±5%
Max time lag for data updates:	5seconds
Signal source:	Internet
Indoor temp effective range:	0~50°C
Indoor humidity effective range:	20~90%RH
Operating temperature range:	4~40°C
Operating humidity range:	30~80%RH
Indoor data refresh cycle:	3seconds
Max WIFI connection time:	30seconds
Network configuration operation instructions	
Power On:	On power-on, default time shows 2000.02.09 00:00. If network is configured, the module will refresh the latest weather data within 5 seconds.
Power Off:	No power drain when off; time resets to default on next boot.
Display:	Weather: icons left to right = sunny, cloudy, rainy, snowy; UV index: 9 levels (L/M/H). PM2.5: 10 levels (L/M/H). Outdoor data refreshed from server every 60 min; indoor temp/humidity updated every 3 s.
Network Setup:	With Wi-Fi available, make sure the module and phone are within the same Wi-Fi router's coverage; then turn on Bluetooth on the phone and scan the QR code below with WeChat (phone must be on the Wi-Fi; for iPhone, enable WeChat in Settings > Bluetooth > Privacy).



ZRY-BA7273

3-Key with Display (CN/EN Version)

Overview: Time/temp/humidity/date display + RGB (dynamic & static colors) + 1/2/3-color LED + anti-fog + BT (opt.) + radar (opt.) + auto anti-fog (opt.).

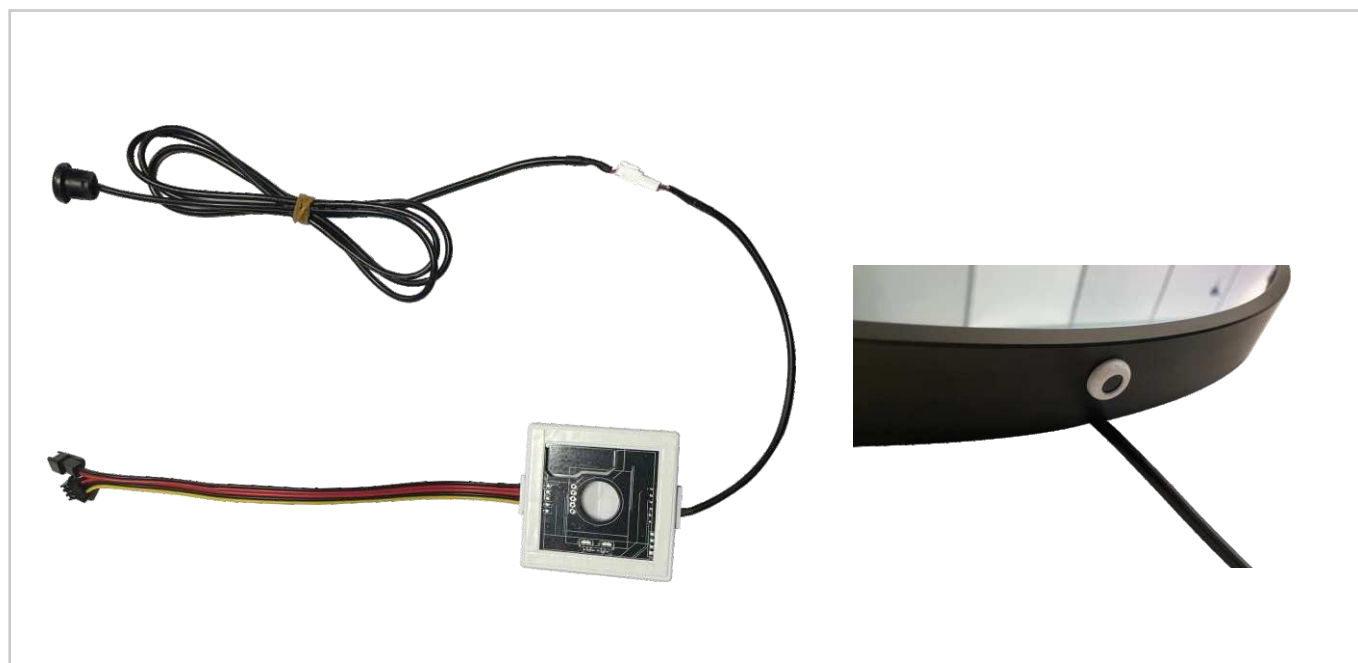


Product Size:	166×104×10.5mm (L×W×H)
Operating Voltage:	DC12V/DC24V
Key Backlight:	White always-on
Time & Temp:	12H/24H, optional date; super-cap keeps running ~7 days off-grid; °C/°F
Max Load, 1-CH LED strip:	12V-65W / 24V-130W (customizable)
	Max Load, 2-CH LED strip: 12V-130W / 24V-260W (dual-CH half-power, customizable)
	Max HV Anti-Fog Load: AC110V-66W / AC220V-132W
	RGB strip: any length; dynamic effects (colorful, meteor, breathing) and static colors (white, multicolor, red, yellow, green, cyan, blue, purple)
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W (no extra relay needed; external relay optional; built-in relay opens anti-fog with no noise).
Auto anti-fog on/off (optional):	Off (or preset value) at factory. When bathroom humidity reaches a certain level and the mirror needs anti-fog, read the displayed humidity and set it as the auto-trigger value — e.g., if fog appears at 75%, set 75% as the auto anti-fog threshold.
Brightness:	5%–100%
Color Temp:	Continuous (cool→warm) / stepped (cool–neutral–warm)
Radar Range:	Radar (microwave) on/off, 1–3 m (customizable)
Sensing:	capacitive touch;
glass	3–6mm
Optional:	1. Power-off memory 2. Scheduled off 3. Fade in/out, stepless dimming & CCT; backlight blinks at limits 4. Bluetooth name & password customizable (alphanumeric) 5. ...

ZRY-LA4230

Cap-Head Hand-Wave Switch

Overview: 1-CH single-color strip; anti-fog; hand-wave on/off; memory.



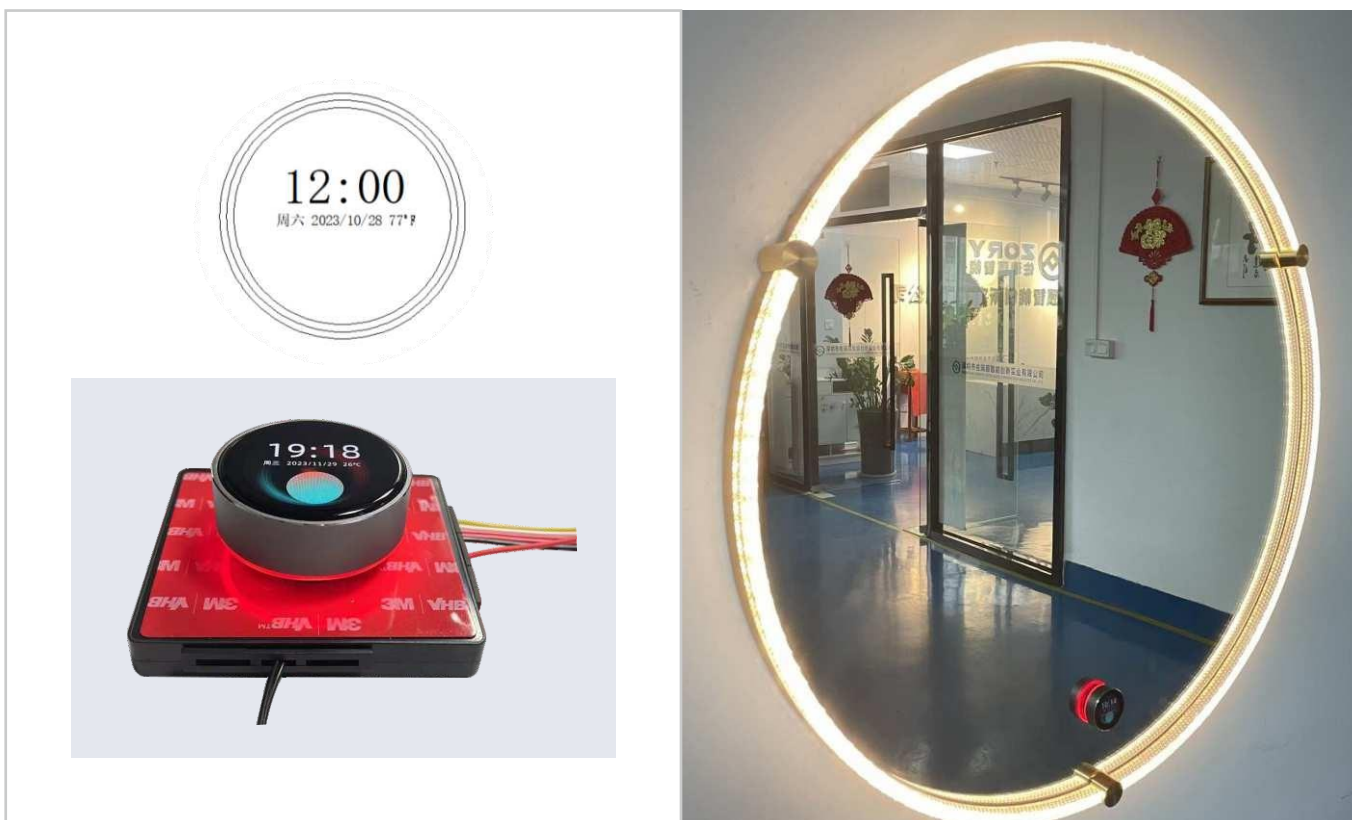
Product Size:	60×60×10.5mm (L×W×H)
Operating Voltage:	DC12V/DC24V
Key Backlight:	Blue standby / white on (customizable)
Max Load, 1-CH Strip:	12V-65W, 24V-130W
Max Load, 2-CH Strip:	12V-130W / 24V-260W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	AC110V-66W / AC220V-132W
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W
(No extra relay needed; external relay optional; built-in relay drives anti-fog silently — no noise/spark/cycle limit)	
Brightness:	5%–100%
Color Temp:	continuous (cool→warm) / stepped (cool–neutral–warm)
Optional:	1. Power-off memory
	2. Auto-off timing customizable
	3. Radar range pre-set at factory
	4. ...
[Note] Custom logic available; final per samples.	

ZRY-SHIB00

Smart Knob Screen

Overview: Tri-color light, anti-fog, time/temp/humidity display, CN/EN switch; memory...

Other
Models

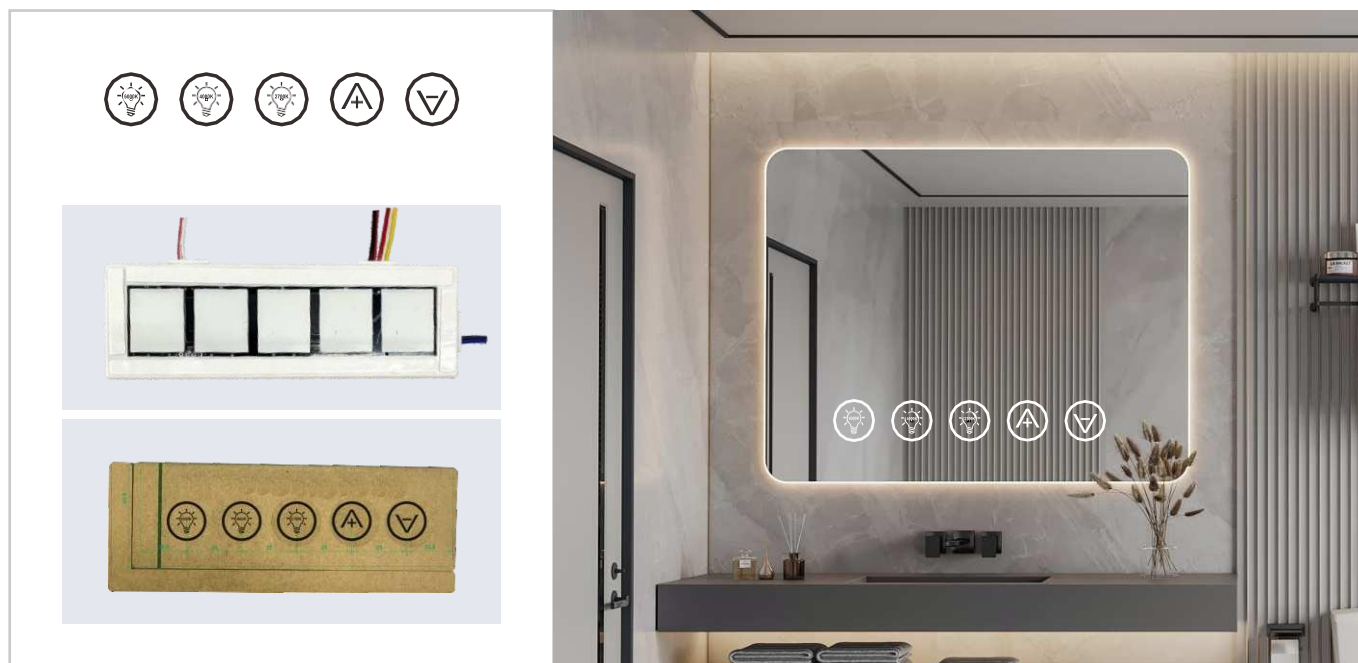


Product Size:	As shown (L×W×H)
Operating Voltage:	DC12V/DC24V
Knob Backlight:	6-color breathing light: red/yellow/green/azure/royal/purple cycle
Time & Temp:	12H/24H; super-cap keeps running ~7 days off-grid; °C/°F
Max Load, 1-CH Strip:	12V-65W / 24V-130W (customizable)
Max Load, 2-CH Strip:	12V-130W / 24V-260W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	External Relay
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W。
Brightness:	5%–100%
Color Temp:	Continuous (cool→warm) / stepped (cool–neutral–warm)
Operation:	Short press / long press / rotate
Glass Hole Dia.:	28.5–29mm
Optional:	Customer-defined: e.g., Bluetooth, Wi-Fi, weather forecast
[Note] Custom logic available; final per samples.	

ZRY-TK1005

5-Key

Overview: Tri-color light, stepless dimming, anti-fog (auto-off 1h if forgotten); memory & power-off memory...

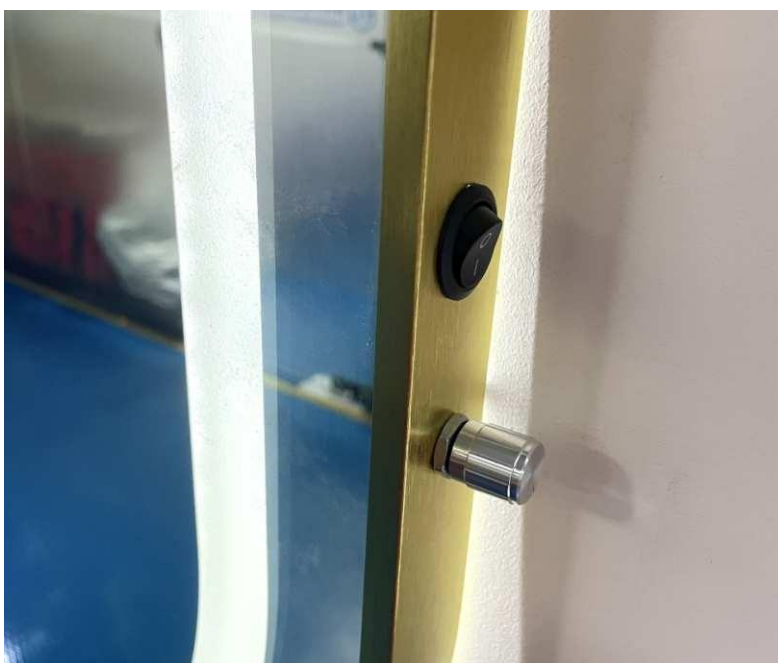


Product Size:	120×73×10.5mm (L×W×H)
Operating Voltage:	DC12V/DC24V
Key Backlight:	Blue standby / white on (customizable)
Time & Temp:	/
Max Load, 1-CH Strip:	12V-65W / 24V-130W (customizable)
Max Load, 2-CH Strip:	12V-130W / 24V-260W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	Built-in 2A relay / external relay
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W。
Brightness:	5%–100%
Color Temp:	Continuous (cool→warm) / stepped (cool–neutral–warm)
Sensing:	capacitive touch;
glass	3–6mm
Optional:	1. Power-off memory
	2. Scheduled off / auto anti-fog off
	3. Double-click toggles light & anti-fog
	4. Fade in/out, stepless dimming & CCT; backlight blinks at limits
	5. Presence sensing
	6. Bluetooth name & password customizable (alphanumeric)
	7. ...
[Note] Custom logic available; final per samples.	

ZRY-MT4AB1

Knob + Rocker Combo Switch

Overview: Tri-color light, stepless dimming, anti-fog (auto-off 1h if forgotten); memory & power-off memory...

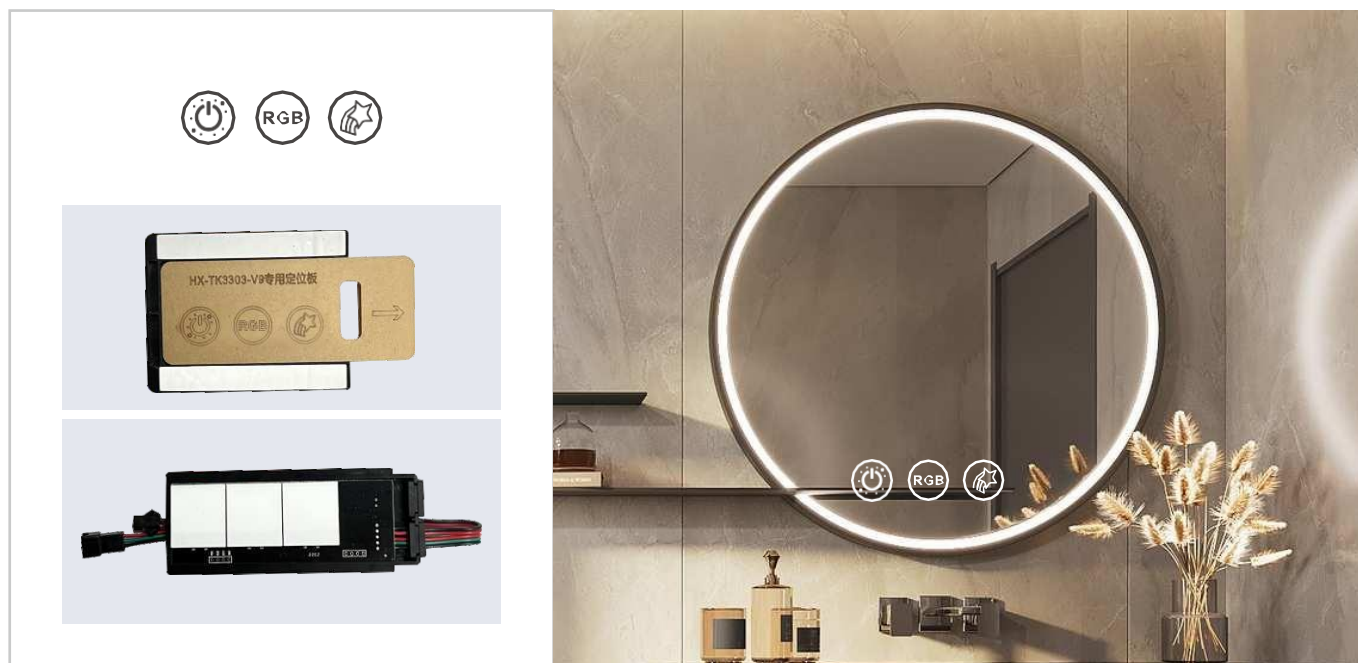


Product Size:	60×60×10.5mm (L×W×H)
Operating Voltage:	DC12V/DC24V
Key Backlight:	/
Time & Temp:	/
Max Load, 1-CH Strip:	12V-65W / 24V-130W (customizable)
Max Load, 2-CH Strip:	12V-130W / 24V-260W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	Built-in 2A relay / external relay
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W。
Brightness:	5%–100%
Color Temp:	Continuous (cool→warm) / stepped (cool–neutral–warm)
Principle:	rotary control;
glass:	N/A
Optional:	1. Power-off memory
	2. Scheduled off / auto anti-fog off
	3. Double-click toggles light & anti-fog
	4. Fade in/out, stepless dimming & CCT; backlight blinks at limits
	5. Presence sensing
	6. Bluetooth name & password customizable (alphanumeric)
	7. ...
[Note] Custom logic available; final per samples.	

HX-TK3303

3-Key

Overview: Controls RGB colorful strips (meteor, breathing, comet, rainbow, running effects); memory.



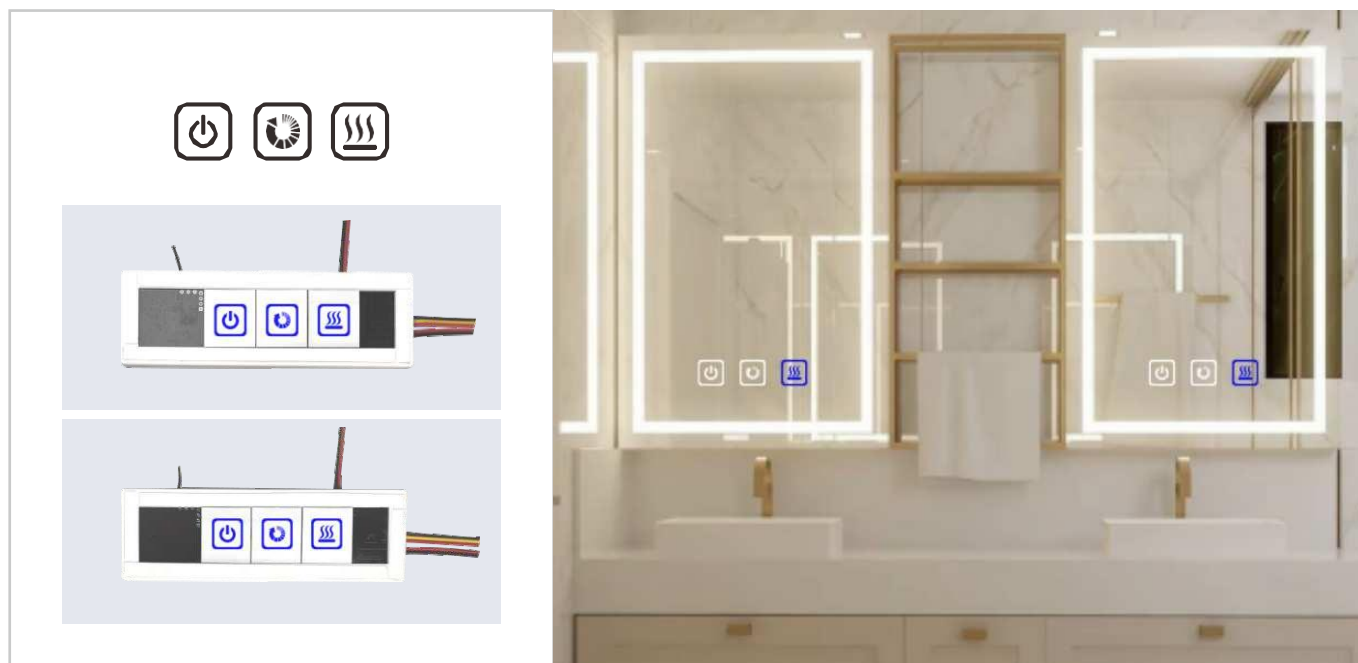
Product Size:	119×73×11mm (L×W×H)
Operating Voltage:	DC12V/DC24V
Key Backlight:	Blue standby / white on (customizable)
Time & Temp:	/
Max Load, 1-CH Strip:	12V-65W / 24V-130W (customizable)
Max Load, 2-CH Strip:	12V-130W / 24V-260W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	N/A
Max LV Anti-Fog Load:	N/A
Brightness:	5%–100%
Color Temp:	RGB effects
Sensing:	capacitive touch;
glass	3–6mm
Optional:	1. Power-off memory
	2. Scheduled off / auto anti-fog off
	3. Double-click toggles light & anti-fog
	4. Fade in/out, stepless dimming & CCT; backlight blinks at limits
	5. Presence sensing
	6. Bluetooth name & password customizable (alphanumeric)
	7. ...
[Note] Custom logic available; final per samples.	

ZRY-TK1803

Wireless Switch (1/2/3-Key)

Overview: Two independent switches control two 1-CH single-color / 2-CH dual-tri-color strips; anti-fog; memory.

Other
Models

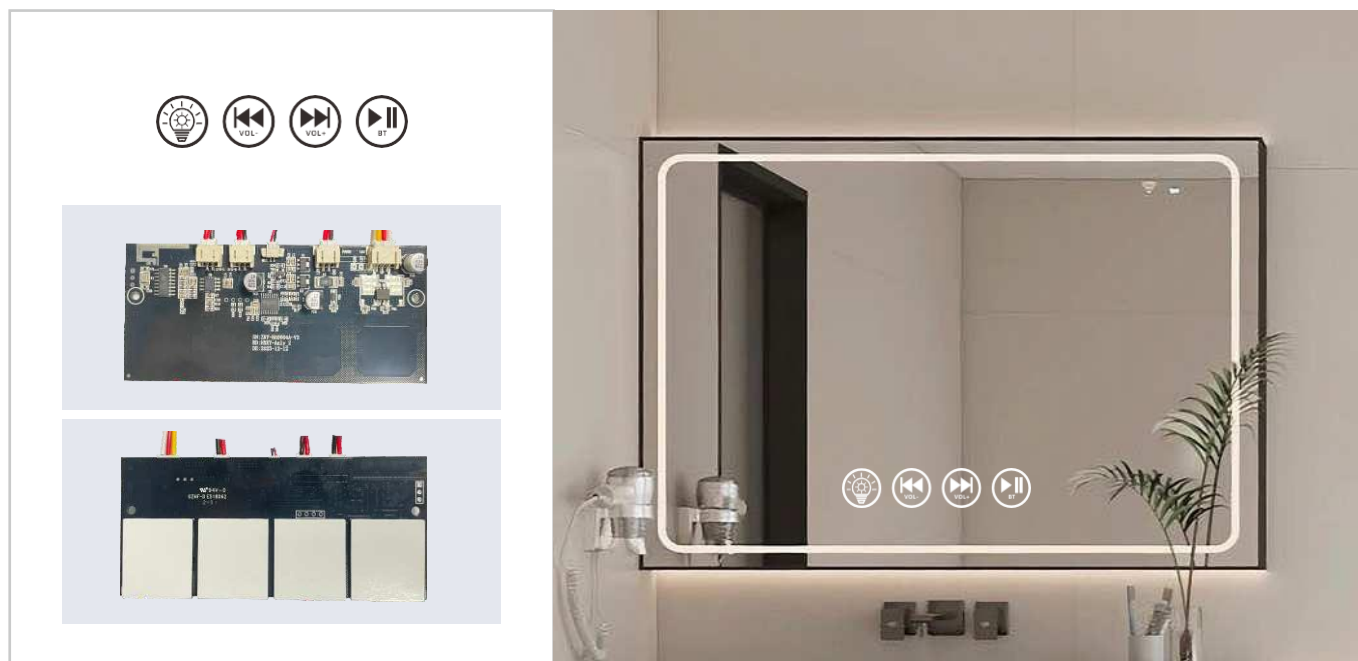


Product Size:	142×46×11mm (L×W×H)
Operating Voltage:	DC12V/DC24V
Key Backlight:	Blue standby / white on (customizable)
Time & Temp:	/
Max Load, 1-CH Strip:	12V-65W / 24V-130W (customizable)
Max Load, 2-CH Strip:	12V-130W / 24V-260W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	Built-in 2A relay / external
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W。
Brightness:	5%–100%
Color Temp:	Continuous (cool→warm) / stepped (cool–neutral–warm)
Sensing:	capacitive touch;
glass	3–6mm
Optional:	1. Power-off memory
	2. Scheduled off / auto anti-fog off
	3. Double-click toggles light & anti-fog
	4. Fade in/out, stepless dimming & CCT; backlight blinks at limits
	5. Presence sensing
	6. Bluetooth name & password customizable (alphanumeric)
	7. ...
[Note] Custom logic available; final per samples.	

BA0004

4-Key Bluetooth (Basic)

Overview: tri-color light, stepless dimming, anti-fog (auto-off 1h if forgotten) + Bluetooth; memory & power-off memory...



Product Size:	110×50×11mm (L×W×H)
Operating Voltage:	DC12V/DC24V
Key Backlight:	Blue standby / white on (customizable)
Time & Temp:	/
Max Load, 1-CH Strip:	12V-65W / 24V-130W (customizable)
Max Load, 2-CH Strip:	12V-130W / 24V-260W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	Built-in 2A relay / external relay
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W。
Brightness:	5%–100%
Color Temp:	Continuous (cool→warm) / stepped (cool–neutral–warm)
Sensing:	capacitive touch;
glass	3–6mm
Optional:	1. Power-off memory
	2. Scheduled off / auto anti-fog off
	3. Double-click toggles light & anti-fog
	4. Fade in/out, stepless dimming & CCT; backlight blinks at limits
	5. Presence sensing
	6. Bluetooth name & password customizable (alphanumeric)
	7. ...
[Note] Custom logic available; final per samples.	

ZRY-BA5306

6-Key Bluetooth (No Display)

Overview: tri-color light, stepless dimming, anti-fog (auto-off 1h if forgotten) + Bluetooth; memory & power-off memory...

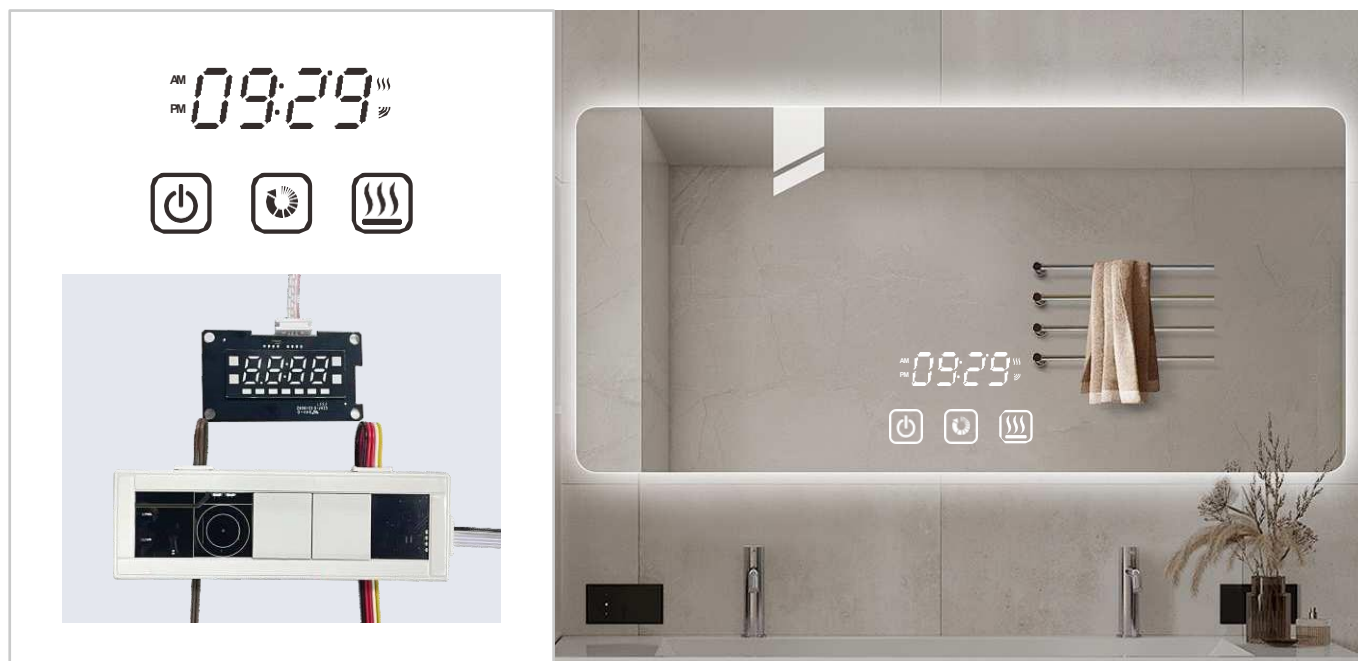
Other
Models



Product Size:	148×70×12.8mm (L×W×H)
	DC12V/DC24V
Key Backlight:	Blue standby / white on (customizable)
Time & Temp:	/
Max Load, 1-CH Strip:	12V-65W / 24V-130W (customizable)
Max Load, 2-CH Strip:	12V-130W / 24V-260W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	Built-in 2A relay / external relay
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W。
Brightness:	5%–100%
Color Temp:	Continuous (cool→warm) / stepped (cool–neutral–warm)
Sensing:	capacitive touch;
glass	3–6mm
Optional:	1. Power-off memory
	2. Scheduled off / auto anti-fog off
	3. Double-click toggles light & anti-fog
	4. Fade in/out, stepless dimming & CCT; backlight blinks at limits
	5. Presence sensing
	6. Bluetooth name & password customizable (alphanumeric)
	7. ...
[Note] Custom logic available; final per samples.	

2/3-Key TK1A03 + Time & Temp TK1A10

Overview: Tri-color light, stepless dimming, anti-fog (auto-off 1h) + time & temp; memory & power-off memory...



Product Size:	Switch: 141×46×11mm; time module: 72×41×8 (L×W×H)
Operating Voltage:	DC12V/DC24V
Key Backlight:	Blue standby / white on (customizable)
Time & Temp:	12H/24H, °C/°F
Max Load, 1-CH Strip:	12V-65W / 24V-130W (customizable)
Max Load, 2-CH Strip:	12V-130W / 24V-260W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	Built-in 2A relay / external relay
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W。
Brightness:	5%–100%
Color Temp:	Continuous (cool→warm) / stepped (cool–neutral–warm)
Sensing:	capacitive touch;
glass	3–6mm
Optional:	1. Power-off memory
	2. Scheduled off / auto anti-fog off
	3. Double-click toggles light & anti-fog
	4. Fade in/out, stepless dimming & CCT; backlight blinks at limits
	5. Presence sensing
	6. Bluetooth name & password customizable (alphanumeric)
	7. ...
[Note] Custom logic available; final per samples.	

ZRY-NW7404

5-Touch-Key Voice Controller

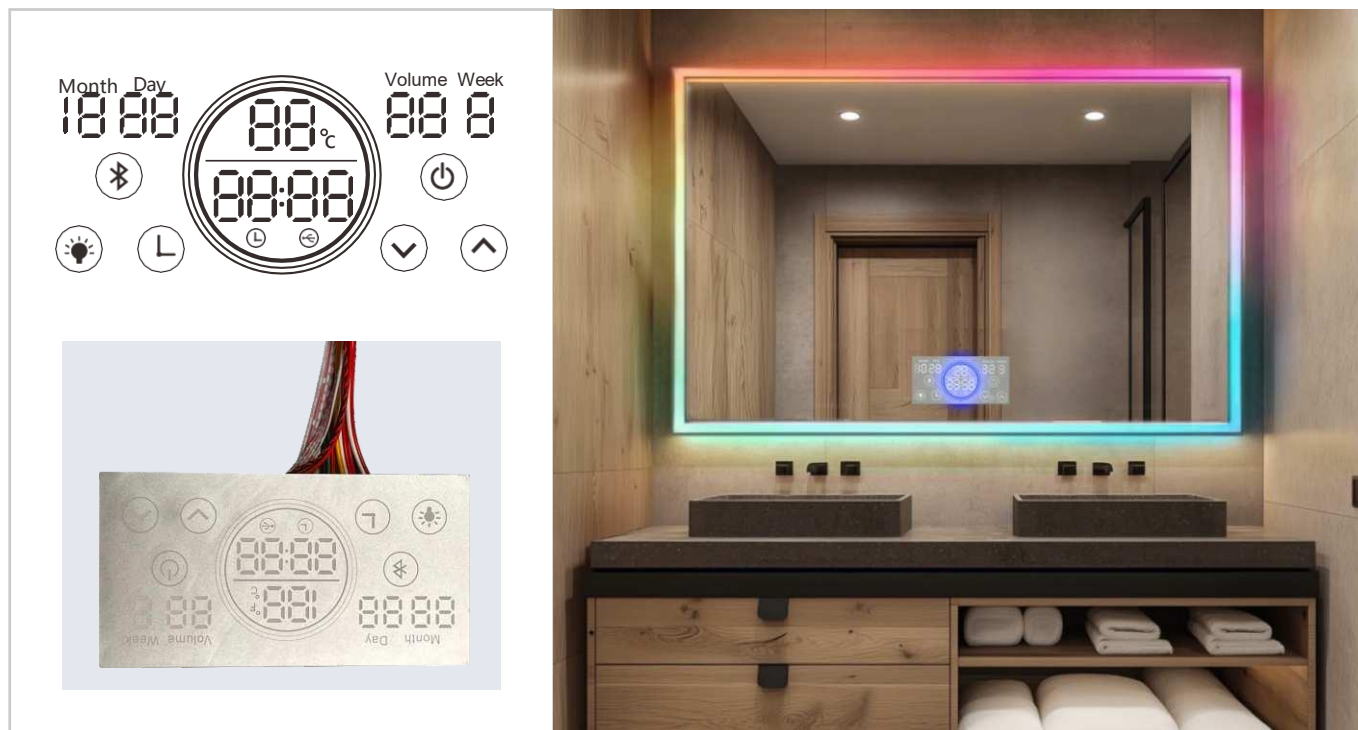
Other Models



Function	Command word	Response
Wake words	Tmall Genie	Master, I'm the cutest mirror
	Xiaorui, xiaorui	【Ding dong】
	Xiaou, xiaou	【Ding dong】
Exit and wake up	\	
Light ON/OFF Commands	Turn on light	OK, light on
	Turn on	
	Turn off light	OK, light off
Light Adjustment Commands	Turn off	
	Brighten a bit	OK, brightness up
	Brighten	
	Dim a bit	OK, brightness down
	Dim	
	Max brightness	OK, max brightness
	Min brightness	
	Min brightness	OK, min brightness
	White light	OK, white light
	Warm light	OK, warm light
Ambient Light Commands	Neutral light	OK, neutral light
	Ambient light on	OK, ambient light on
	Ambient light off	OK, ambient light off
Multimedia control commands	Volume up	Volume up
	Volume down	Volume down
	Pause music	OK
	Play music	OK
	Play online music	OK
	Play Bluetooth music	OK
	Play local music	OK
	Play pause	
	The previous	OK
	Next song	OK
Reset command	Turn on Bluetooth	
	Turn off Bluetooth	
	Restore factory settings	Restoring factory settings

ZRY-BAP116

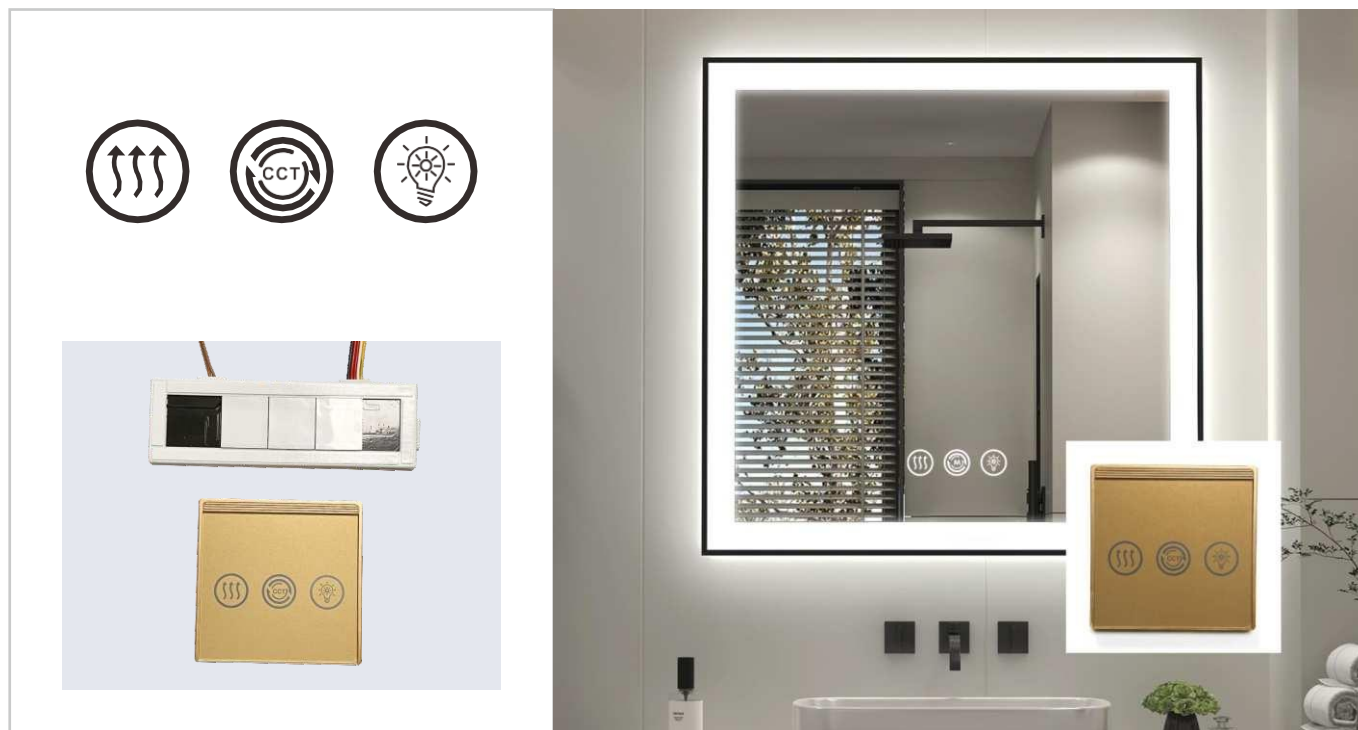
6-Key Controller



Strip Key:	Short press: light on/off + tri-color switch; long press (light on): stepless brightness. If idle 5s, short press turns light off; short press again restores. When light on, this key stays white-lit; its backlight goes off with the light.
Bluetooth Key:	Short press: BT on/off; long press 1s: play/pause; long press 5s: disconnect; hold 10s: force BT reset. Key backlight is off when BT off, blue when BT on.
Clock/Set key:	short press toggles time/year display. Long press enters setting mode; short press switches items; long press selects the item (flashing) and adjusts via +/- keys; long press saves and exits. White when not powered off.
Decrease Key:	In clock setting: short/long press decreases the value. In BT mode: short press previous track, long press volume down. When not powered off, this key stays white-lit.
Next Track Key:	In clock setting: short/long press increases the value. In BT mode: short press next track, long press volume up. When not powered off, this key stays white-lit.
RGB Key:	Short press: RGB on/off + effect switch; long press: dimming. If idle 5s, short press turns RGB off; short press again restores. When RGB off, long press powers the unit off; short press powers it on. BT defaults off at boot; power-off clears all other key backlights, display and BT. This key is white when on, dark when off.

ZRY-TK1803 & ZRY-TKQ833

3-Key Wireless Controller



Key 1: short press toggles anti-fog. When anti-fog is off, long press turns backlight off; short press again restores. Anti-fog off: blue backlight; on: white.

Key 2: short press cycles CCT (white → mixed → yellow → repeat); long press stepless color. Light off: blue backlight; on: white.

Key 3: short press light on/off; long press dimming. When light is off, long press Key 3 turns off Key 2/3 backlights; short press again restores.

Light off: blue; on: white.

Pairing:

Anti-fog off: turn lights off, long press the light key until the screen goes off, then long press again to enter pairing — backlight blinks blue slowly for 3s; press any key on the wireless panel to complete pairing.

Anti-fog on: turn lights off, long press the light key until the screen goes off, then long press again to enter pairing — backlight blinks blue fast for 5s; all paired switches are cleared 10s after blinking stops. During this time, do not press the wireless panel or trigger sensing.

Sensing countdown off-time setting:

Off-time steps: 1min → 2min → 5min → 10min (4 levels, default 1min). With light on and anti-fog off, long press the anti-fog key to enter sensing setting — key backlight blinks blue continuously.

Auto-exits if idle for 10s in setting mode.

While blinking blue, each short press flashes white once and raises the level by 1 (max 4);

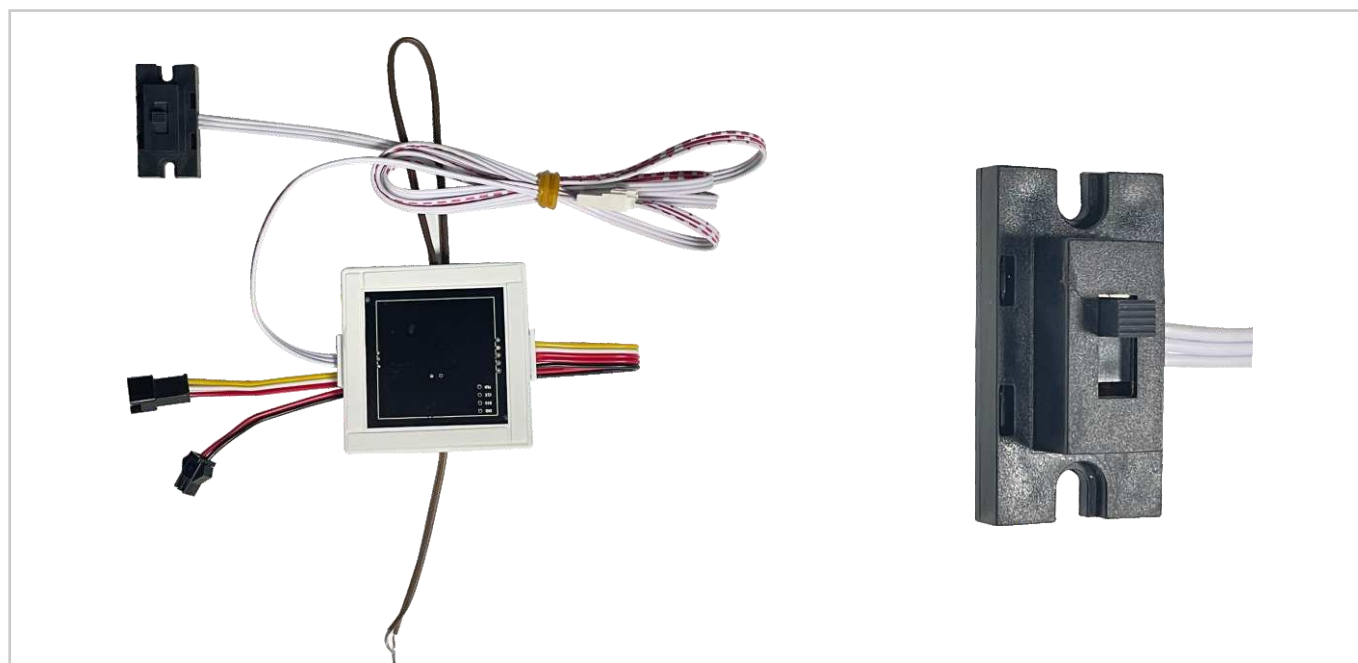
long press saves — the white light blinks as many times as the level.

Long press save without selecting a level disables sensing; backlight flashes blue once and goes off. Saved levels survive power-off (memory).

ZRY-MT4AB0

Toggle Switch

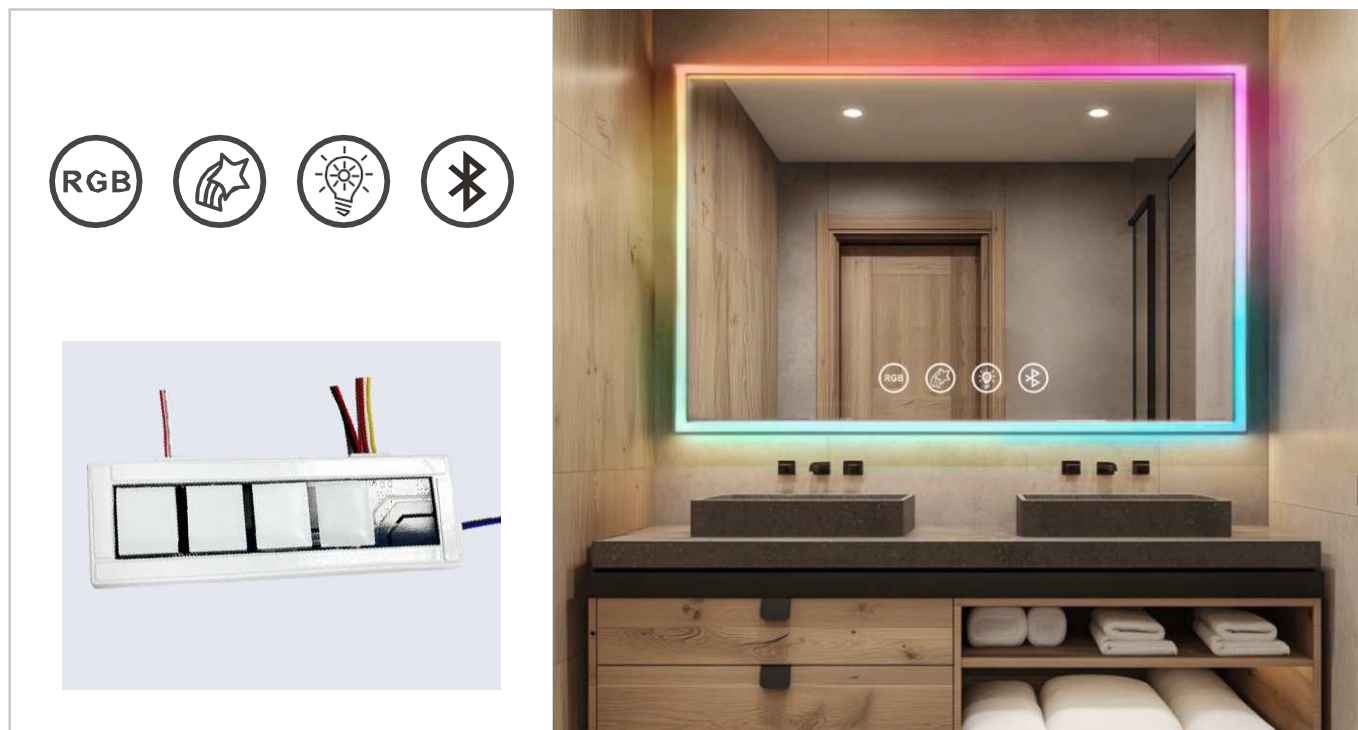
Overview: Tri-color light, stepless dimming, anti-fog (auto-off 1h if forgotten); memory & power-off memory...



Product Size:	60×60×60mm (L×W×H)
	DC12V/DC24V
Key Backlight:	/
Time & Temp:	/
Max Load, 1-CH Strip:	12V-65W / 24V-130W (customizable)
Max Load, 2-CH Strip:	12V-130W / 24V-260W (dual-CH half-power, customizable)
Max HV Anti-Fog Load:	Built-in 2A relay / external relay
Max LV Anti-Fog Load:	DC12V-36W/60W, DC24V-72W/120W。
Brightness:	5%–100%
Color Temp:	Continuous (cool→warm) / stepped (cool–neutral–warm)
Sensing:	N/A
Glass:	any thickness
Optional:	1. Power-off memory
	2. Scheduled off / auto anti-fog off
	3. Double-click toggles light & anti-fog
	4. Fade in/out, stepless dimming & CCT; backlight blinks at limits
	5. Presence sensing
	6. Bluetooth name & password customizable (alphanumeric)
	7. ...
[Note] Custom logic available; final per samples.	

ZRY-TK1394

3-Key Controller Manual



Key 1: short press toggles light & cycles CCT (cool → warm → mixed → off); after 10s idle, short press turns off; short press again restores; long press stepless dimming. In standby, long press 3s powers off (all functions and backlights); short press any key restores. Standby: white backlight; light on: blue.

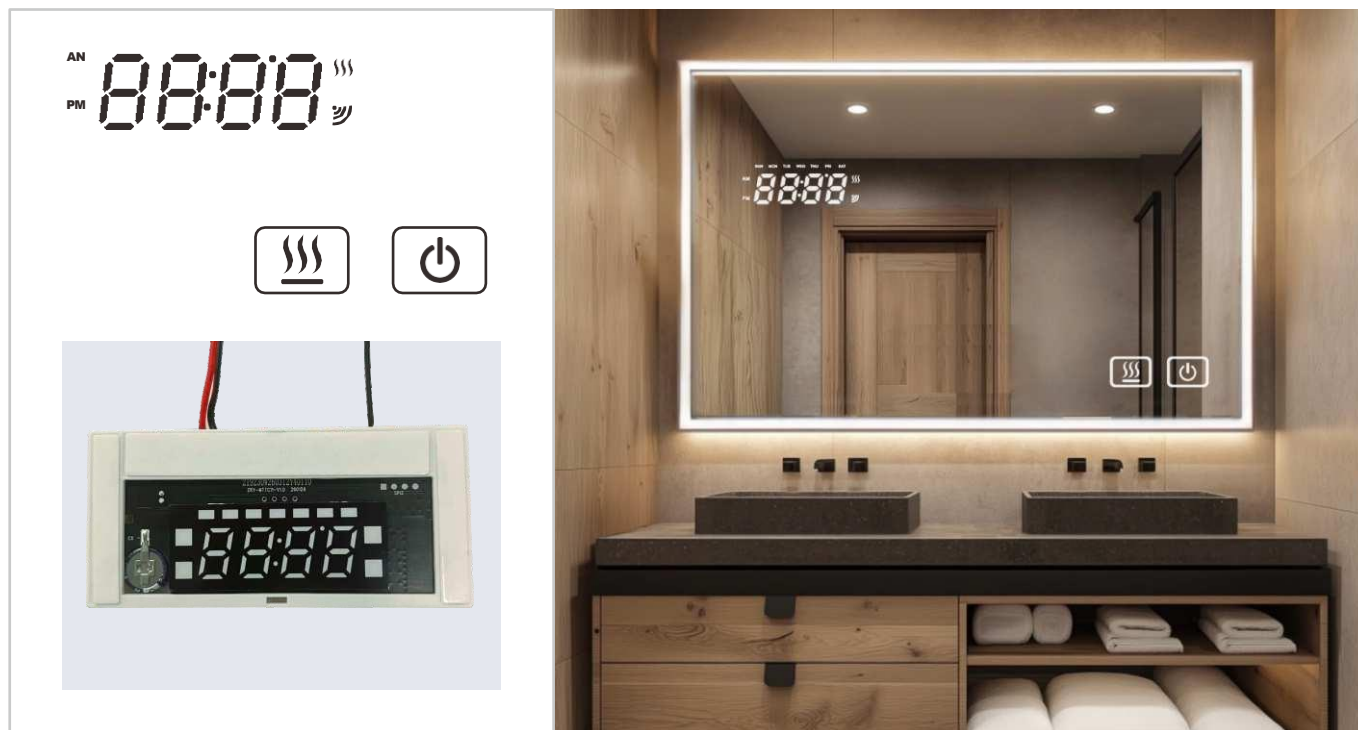
Key 2: short press cycles RGB effects; long press toggles RGB strip. RGB key white always-on, dark while pressed, restores on release.

Key 3: short press toggles BT power. Standby: white; BT on: blue.

Standby: blue backlight; light on: white. Standby: blue; BT on: white.

ZRY-MTTC11

Time/Temp Display Module



Overview:	Time / Temp / Weekday / AM-PM display; auto time sync via Bluetooth
Time Format:	24H format; 12H optional
°C Range:	-20°C to 100°C, ±1°C
Optional °F (range):	-4°F to 212°F, ±2°F
Default Format:	24H format & Celsius
Product Size:	94×44×8mm (L×W×H)
Operating Voltage:	DC12V/DC24V
Key Backlight: N/A	Max Load, 1-CH Strip: N/A
	Max Load, 2-CH Strip: N/A
	Max HV Anti-Fog Load: N/A
	Max LV Anti-Fog Load: N/A
	Brightness: N/A
	Color Temp: N/A
	Sensing: N/A
	Glass: any thickness
	[Note] Custom logic available; final per samples.

ZRY-WXC01

Wireless Charging Module

Other
Models



Input: DC12/24V

Power: 15W

Current: 1.5A

Size: $\Phi 80.05 \times H12.59\text{mm}$

Material: ABS

ZRY-ACE663321-24

External Relay

External relay

Product: External relay

Model: ZRY-ACE663321-24

Size: 65×32×20mm (L×W×H) Voltage: DC24V

Overview:

Controls HV mains or LV branch circuits by switching LV DC on/off.

Product Name: external relay

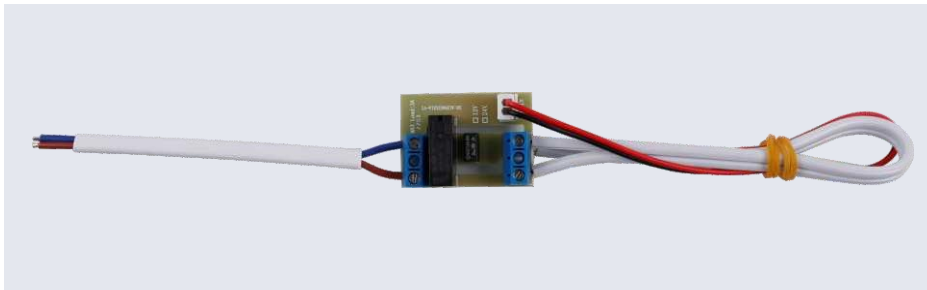
Product model: zry-ace663321-24

Product size: 65*32*20mm (length width height)

Working voltage: DC24V

Function overview:

By controlling the on and off of low-voltage DC, the on-off of high-voltage mains or low-voltage tributaries can be controlled.



ZRY-ACE663321-12

External Relay

External relay

Product: External relay

Model: ZRY-ACE663321-12

Size: 65×32×20mm (L×W×H) Voltage: DC12V

Overview:

Controls HV mains or LV branch circuits by switching LV DC on/off.

Product Name: external relay

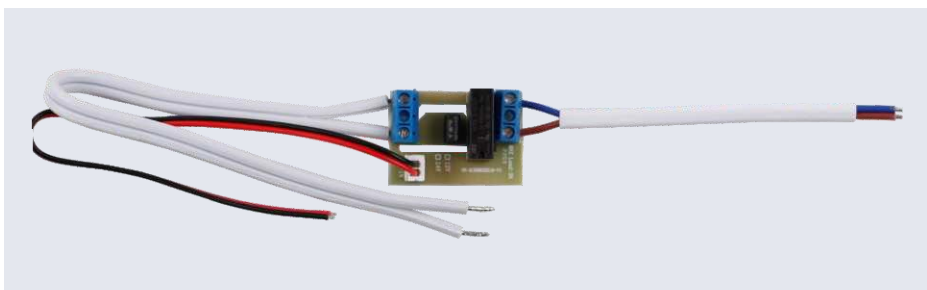
Product model: zry-ace663321-12

Product size: 65*32*20mm (length width height)

Working voltage: DC12V

Function overview:

By controlling the on and off of low-voltage DC, the on-off of high-voltage mains or low-voltage tributaries can be controlled.



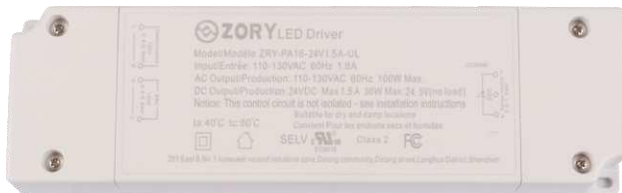
Switching Power Supply

36W Single-Output Switching PSU

UL Series

LED Driver 12V 36W

Certificate No. UL-CA-2217599-0



- Features
- ▲ Universal AC input 100–240V, up to 87.4% efficiency
- ▲ Protection: short circuit / overload / overvoltage; 36W; natural air cooling
- ▲ PWM control circuit
- ▲ 100% full-load burn-in test
- ▲ 1-year warranty



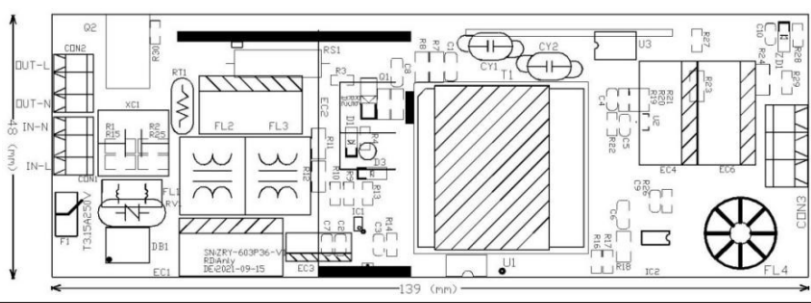
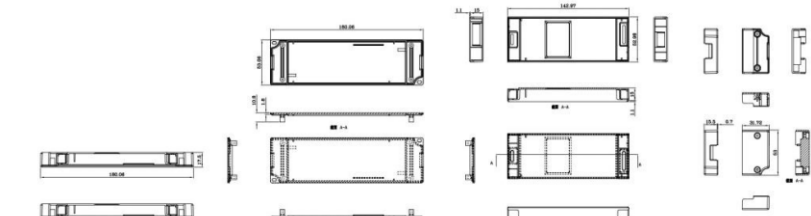
Electrical Specs

Model		ZRY-603P36-V1			
Output	DC voltage	12V			
	Rated current	3A			
	Current Range (Natural Cooling)	0-3A			
	Rated power (natural cooling)	36W			
	Ripple and noise	120mVp-p			
	Voltage adjustment range	11.40V-12.60V			
	Voltage accuracy	±5.0%			
	Linear adjustment rate	±0.3%			
	Load regulation rate	±1.0%			
	Launch, rise time	800mS,50mS/230VAC 1600mS,60mS/115VAC (When fully loaded)			
	Keep the time	15mS/230VAC 15mS/115VAC (When fully loaded)			
Input	Operating voltage and frequency	90~264VAC或127~370VDC 47-63Hz			
	Efficiency	0.87			
	AC current	1.0A/115VAC 0.5A/230VAC			
	Surging currents	Cold start:30A			
	Leakage current	<3mA/240VAC			
Protection	Overload	Rated output power 110%-200% Protection mode: Hiccupping mode, automatically restores after the load is normal			
	Overvoltage	Protection mode: Hiccupping mode			
	Operating temperature	-20~+70°C(Please refer to the "Deduction Curve.")			
Environment	Operating humidity	20~90%RH,			
	Storage temperature, humidity, and temperature coefficient	-40~+85°C; 10~95%RH; ±0.05%/°C(0~50°C)			
	Vibration resistant	10~500Hz,2G10 / ,X、Y、Z 60			
Safety regulation s and electroma gnetic compatibil ity (Note 6)	Safety standards	UI8750 (			
	Withstand pressure	I/P- O/P 3.0KVAC(DC4242V)			
	Insulation resistance	NC			
	Electromagnetic compatible transmission	FCC15			
	Electromagnetic compatibility immunity	NC			

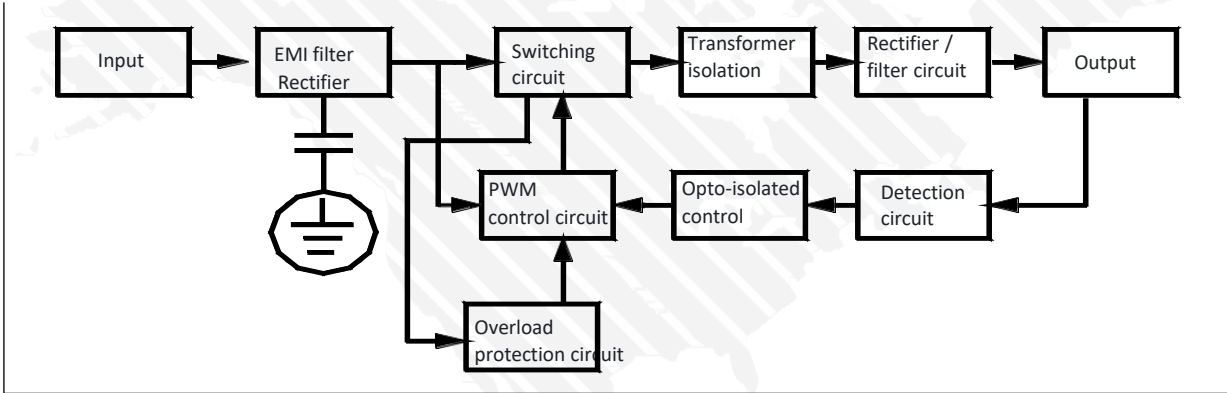
	MTBF	100Khrs.MIL-HDBK-217F(25°C)
Others	Dimensions	139X48X12mm(L×W×H)
	Packaging	
Note	1. Unless otherwise specified, all specifications were measured at an input of 230VAC, rated load, and an ambient temperature of 25°C 2. Ripple and noise measurement method: Use a 12" twisted pair cable, with the terminal connected in parallel with 0.1uF and 47uF electro-pneumatic connections, measuring at a 20MHz bandwidth 3. Accuracy: includes setting errors and linear load adjustment rates. 4. Linear regulation rate measurement method: Testing from low voltage to high voltage under rated load 5. Load regulation rate measurement method: from 0% to 100% rated load 6. The power supply should be regarded as part of the system components and should be verified in conjunction with terminal devices for electromagnetic compatibility.	

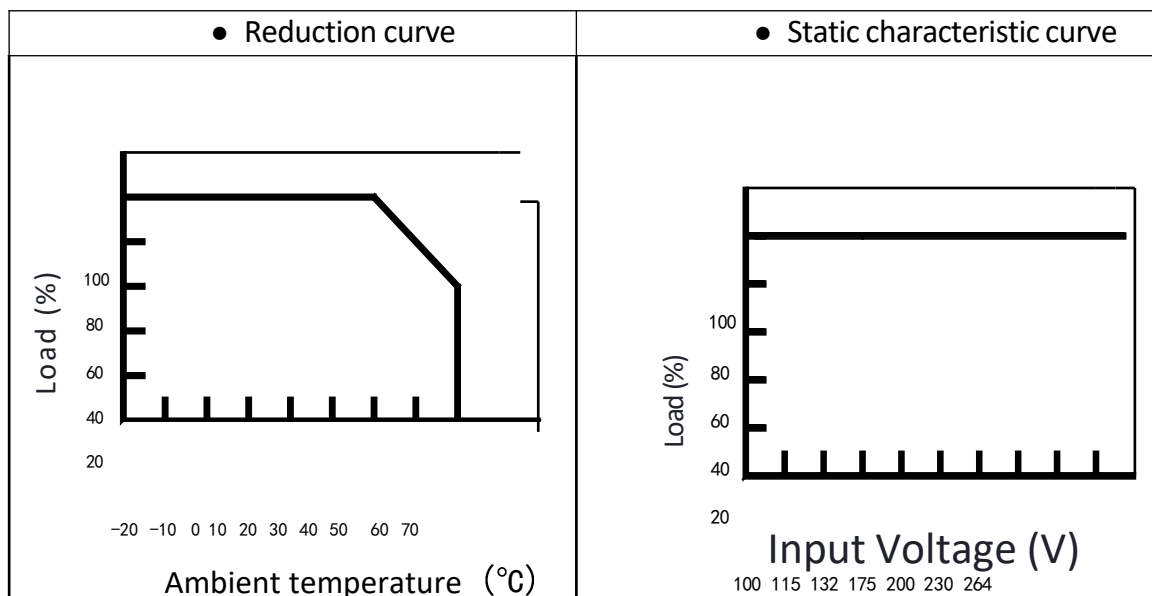
36W Single-Output Switching PSU

Power Supply Spec

Mechanical dimensions			
		AcInput terminal	
		Pin number	Pin function
		1	OUT-L
		2	NC
		3	OUT-N
		4	IN-N
		5	NC
		6	IN-L
		DcOutput terminals	
		Pin number	Pin function
		1	V-
		2	CW
		3	V+

Power Architecture





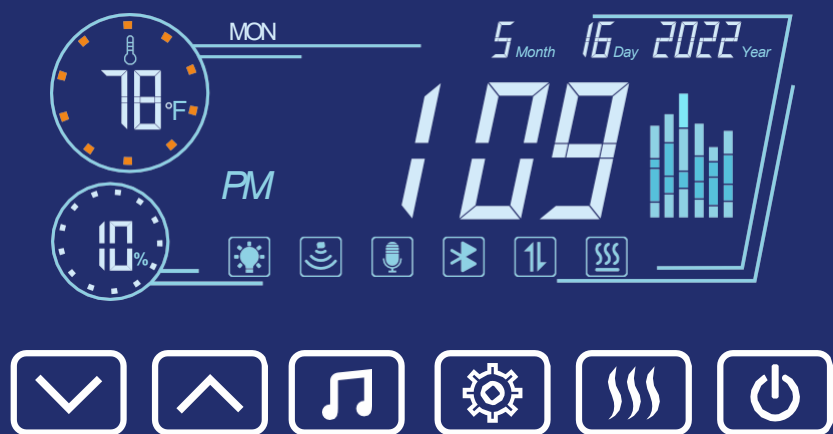
Switching Power Supply CE (12V 2A/3A/4A/5A)



Model	Power	Input voltage	Output voltage	Output current	Efficiency	Dimensions (thickness)	inside relay
ZRY-PACE-24	24W	176-240V	12V	2A	85%	11mm	ok
ZRY-PACE-24	24W	176-240V	12V	2A	85%	15mm	ok
ZRY-PACE-36	36W	176-240V	12V	3A	85%	17mm	ok
ZRY-PACE-36	48W	176-240V	12V	4A	85%	17mm	ok
ZRY-PACE-36	60W	176-240V	12V	5A	85%	17mm	ok

Integrity Quality Professional Efficient

Shenzhen Zoruiyi Intelligent Innovation Industry Co., Ltd.



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