

Model: 21141 | LRRSA



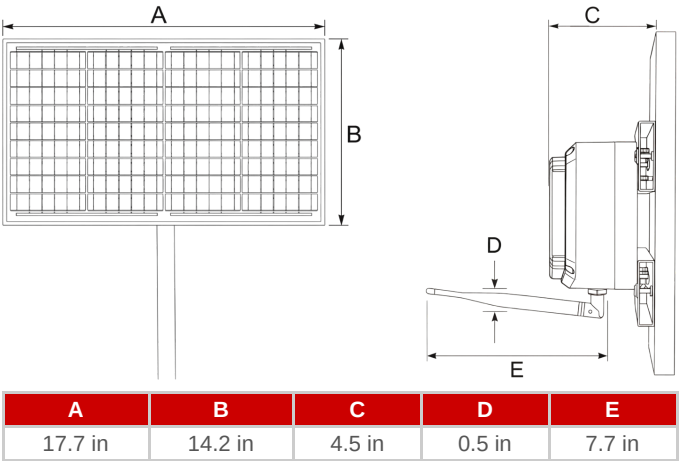
Application

The Photovoltaic IP66 Repeater operates on solar power with a Li-Ion backup battery, retransmitting signals between field devices and the alarm control panel. Suitable for indoor and outdoor use (IP66), including areas without mains power.

Operation

The device retransmits wireless signals, extending network coverage.

Dimensions



Standard Features

- Wireless protocol — 2.4 GHz, ISM band (Industrial, Scientific and Medical).
- Solar panel powered with internal Li-Ion backup battery.
- IP66 ingress protection — suitable for indoor and outdoor installation.
- 128-bit AES encryption; restricted to enrolled installation unit.
- Communication range: up to 120 m indoor and up to 1,500 m outdoor (line of sight).
- Tamper detection: removal alert at control panel within 2 seconds.
- Low-battery alert and level indication at the control panel.
- Equipment fault indication at the Fire Detection and Alarm Panel within 5 minutes.
- Internal battery estimated lifespan of 24 months as specified by the manufacturer; after this period, capacity may decrease — preventive inspection is recommended.

Product Certifications:



Specifications

ENVIRONMENTAL CHARACTERISTICS

Ingress Protection	IP66
Operating temperature	-10 to 55 °C
Storage temperature	0 to 40 °C
Relative humidity	10% to 95%

ELECTRICAL CHARACTERISTICS

Power supply	Solar power
Normal operation current	≤ 360 mA
Triggering current	≤ 1,000 mA

BATTERY

Type	Li-Ion 3.7 V, 2,200 mAh
Charging time	≤ 12 hours
Battery autonomy	≥ 25 h

DIMENSIONS

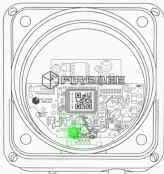
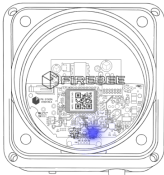
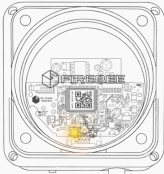
Body (A × B × C)	17.7 × 14.2 × 4.5 in
Antenna (E × D × D)	7.7 × 0.5 × 0.5 in
Weight	3,400 g



Specifications

RADIO FREQUENCY — 802.15.4	
Operating channels	11 to 26 (default 26)
Network encryption	AES 128-bit
Data transfer rate	256 kbps
Modulation	O-QPSK
Antenna gain	5 dBi
TX power	≤ 20 dBm
Sensitivity	-102 dBm
Antenna type	External
Indoor range	120 m
Outdoor range (line of sight)	1,500 m
Standard	802.15.4

LED Indicators

LED	State	Description
	Green Operational	Green LED flashing — device operational.
	Blue Signal Strength	Flashing: low signal strength; solid: high signal strength.
	Yellow Fault	Yellow LED solid — active fault (e.g., sensor removed); communication maintained with the control panel.