BATTERY OPERATED PHOTOELECTRIC DETECTOR

Smart Line's series SL-350 QFR / SL-350 QNR

SPECIFICATIONS

| Model | | SL-350QFR | SL-350QNR | |
|---------------------------|--|--|------------------------|--|
| Maximum detection range | | 100 m/350 ft. | | |
| Maximum arrival distance | | 1000 m/3500 ft. | | |
| Detection method | | Quad infrared beam i | interruption detection | |
| Selectable beam frequency | | 4 channels | | |
| Interruption time | | Variable between 50/100/250/500 ms (4 steps) | | |
| Power source | | Recommend: 3.6 V, 13.0Ah LSH20 lithium batteries manufactured by SAFT Operating range: 3.2 V - 4.0 V lithium batteries Transmitter: 2 or 4 units, Receiver: 2 or 4 units | | |
| Current draw | | $$745\mu A$$ Transmitter: 420 μA + Receiver: 325 μA (at 25°C, 3.6 VDC) | | |
| Battery life ** | | Transmitter: Approx. 4 years Receiver: Approx. 5 years | | |
| | Alarm output | Form C-Solid State Switch: 3.6 VDC, 0.01 A | | |
| Output | Alarm period | 2 sec (±1) (Nominal) | | |
| | D.Q output | Form C-Solid State Switch: 3.6 VDC, 0.01 A (Receiver only) | | |
| | Low battery output | N.C. (mechanical switch): 3.6 VDC, 0.01 A | | |
| | Tamper output (cover, back box, main unit) | N.C. (contact output): 3.6 VDC, 0.01 A Opens when cover, main unit or back box is removed. | | |
| Indicator | Alarm indicator (Receiver) | Alarm: ON Light receiving: OFF | | |
| | Level indicator (Receiver) | Not Light receiving: OFF Light receiving: Flickering or OFF | | |
| | Power indicator (Transmitter) | Power ON: ON Power OFF: OFF | | |
| | Low battery indicator | Voltage reduction: Flickering | | |
| Operating temperature | | -20°C - +60°C (-40°F - 140°F) | | |
| Operating humidity | | 95 % (max.) | | |
| Alignment angle | | ±90° Horizontal, ±10° Vertical | | |
| Dimension | | H x W x D mm(inch): 452 (17.9) x 83 (3.3) x 138 (5.4) | | |
| Weight | | 3300 g (Total weight of Transmitter + Receiver, excluding accessories) | | |
| International protection | | IP65 | | |

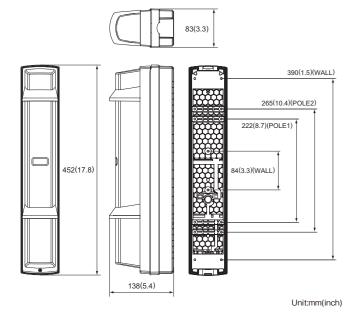
Specifications and design are subject to change without prior notice.

* The value is based on the condition that it is used within the

- ambient temperature range of 20 to 25°C. (LSH-20 x2 pcs)

 ** Using batteries other than those recommended may shorten the battery life.

DIMENSIONS



OPTIONS

Anti Bird Cap ABC-4

Keep birds and small animals off the detector to reduce false alarms. Stop rain and snow streaming in front of the detector to keep the



Back Cover BC-4 Conceal the back side of pole



Beam Alignment Unit BAU-4 Align optical axis automatically. (receiver only)



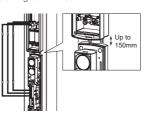
Extension Cable with Connector EC-4

Pole Side Cover PSC-4

mounted back to back.

Conceal the gap between detectors

Extension cables between the back box and the main unit when



Cable length: 500 mm (19.7 inch)

SHORT RANGE MODELS

Battery operated photoelectric detector



AX-100TFR 30m / 100ft. AX-200TFR 60m / 200ft.



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No. 77032-00-15747-1204



Work Smart,

- LONG DISTANCE: 100m/350ft. -

- LONG BATTERY LIFE: 4 to 10 years -

- LONG TERM DURABILITY: IP65 -

BATTERY OPERATED PHOTOELECTRIC DETECTOR

Smart Line[™] **series SL-350 QFR**

SL-350 QNR



Revolution in the perimeter security industry.

Optex offers a less expensive and more efficient solution with SL-350QFR/SL-350QNR.

Typical perimeter systems require expensive trenching or much time for installation.

Expensive wire conduit runs and concrete work is unnecessary, allowing installers to save time and

Advantage of wireless system



- Low installation costs
- Quick & easy installation
- Flexible location
- Wireless stylish design
- Free from lightning damage

SAVE TIME Wired Wireless Dig Install **Adjust** Install Time Go to the Adjust

Various mounting patterns

Please see the last page for more information on the optimal products.













Approx. 4 years Max. 10 years

Low current consumption

When using LSH (3.6V.13Ah) batteries manufactured by SAFT.



| | Transmitter | Receiver |
|----------------------|------------------|------------------|
| 9999 4 pcs | Approx. 8 years | Approx. 10 years |
| D D 2 pcs | Approx. 4 years | Approx. 5 years |



The SL-350QFR and SL-350QNR, our wireless ready, battery operated photoelectric detectors are designed to work with most manufacturer's wireless transmitters, and the back box has enough space to accomodate them.

They are easy deployable and adaptable to any control systems currently installed.







SL-350QFR





Any control panel

Sniper viewfinder

False alarms would be reduced if we can make perfect alignment at the first step. This new telescopic lens has a high level of visibility for optical alignment work. Even when it is the long distance, it can make perfect installation in short period and

ensure stable performance. The actual performance of product is highly dependent on not only product quality but also installation quality.

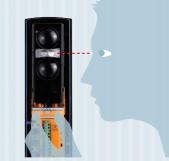


SL-350QFR

Sniper viewfinder







Weather protection IP65



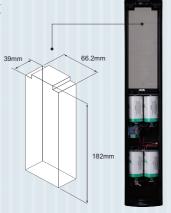


Smart line series are protected from interruption caused by insects, dirt sander or humidity.

Spacious back box

The following figure shows the dimensions of the wireless transmitter installation space in the back box.

Note that transmitter with greater dimensions are not applicable.



Basic performance

- 99% beam blocking stability
- 4 selectable beam frequencies (SL-350QFR only)
- Beam interruption adjustment function
- Triple tamper function (front cover, back box and wall)
- D.Q.circuit (environmental disqualification)
- High grade aspherical lens
- Form C(N.C./N.O.) output
- Battery saving function
- Intermittent output function
- A.G.C.(Automatic Gain Control) circuit



Specifications OPXBCU-5

The OPXBCU-5 is shares power source and low battery signals between the main unit and the wireless transmitter for OPXSL-350QFR/350QNR Series and OPXAX-100TFR/200TFR Series.

Input voltage: 3.2 - 4.0 VDC

Low battery input (EX +/-): N.C. input only

Current draw: Approx. 5 μA at 3.6 VDC (no load)
 Output voltage: Normal : Approx. 3.0 - 3.6 VDC

• Low battery: Approx. 2.0 - 2.6 VDC

• Output current: 100 mA (max)

• Operating temperature: -20°C - +60°C (-4°F - +140°F)

• Operating humidity: 95% (max)

The OPXBCU-5 is compatible for the following models series:

- OPXAX-100TFR, OPXAX-100TFRD, OPXAX-100TFR-BYOTX
- OPXAX-200TFR, OPXAX-200TFRD, OPXAX-200TFR-BYOTX
- OPXSL-350QFR, OPXSL-350QFRD, OPXSL-350QFR-BYOTX
- OPXSL-350QNR, OPXSL-350QNRD, OPXSL-350QNR-BYOTX





LSH 20

Primary Li-SOCI, cell

High power density 3.6 V D-size spiral cell

Saft's LSH 20 cell is ideally suited for longterm applications (typically from 5 to 20+ years), featuring high drain / high pulses currents.

Benefits

- · High power / high energy densities (65 W/kg and 468 Wh/kg)
- · High voltage response, stable during most of the lifetime of the application
- · Wide operating temperature range $(-60^{\circ}C / + 85^{\circ}C)$
- · Low self-discharge rate, compatible with long operating life (less than 3% per year of storage, at + 20°C, after 1 year)
- · Superior resistance to corrosion
- · Low magnetic signature

Key features

- Spiral construction
- Built-in safety vent
- · Finishing top with 5 A fuse
- · Hermetic construction with glass-tometal seal
- Stainless steel can
- · Non-flammable electrolyte
- · RoHS and REACH compliance
- · Made in France

Designed to meet all major quality, safety and environment standards

- Safety: UL 1642, IEC 60086-4
- Transport: UN 3090 and UN 3091
- · Quality: ISO 9001, Saft Excellence System, continuous program

Typical applications

- Utility Metering
- Tracking systems
- Dataloggers
- Alarms and security
- · Wireless sensors
- · Military radios

NATO Stock Number 6135 14 440 1213





Flying leads

| Nominal capacity (under 14 mA, +20°C, 2.0 V cut-off) ³ | 13 Ah |
|---|--------------------------------|
| Open circuit voltage (at +20°C) | 3.67 V |
| Nominal voltage (at 2 mA, + 20°C) | 3.6 V |
| Nominal energy | 47 Wh |
| Pulse capability ⁴ | Up to 4 A |
| Maximum recommended continuous current | 1.8 A |
| For battery sizing, consult Saft | |
| Operating conditions | |
| Operating temperature range ⁵ | -60°C / +85°C (-76°C / +185°F) |
| Storage temperatures (max recommended) ⁶ | +30°C (+86°F) |
| Physical characteristics² | |
| Diameter (max) | 33.26 mm (1.31 in) |
| Height (max) | 61.31 mm (2.41 in) |
| Typical weight | 100 g (3.5 oz) |
| Li metal content | approx. 3.8 g |
| Termination suffix | |
| CN, CNR | Radial tabs |
| 2 PF, 3 PF, 3 PF RP, 4 PF | Radial pins |
| CNA | Axial leads |

Other configurations upon request

Electrical characteristics1

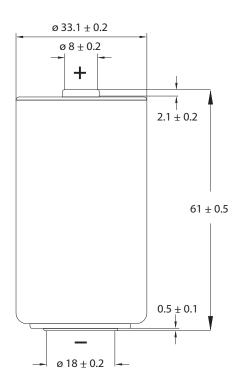
¹Typical values relative to cells stored up to one year at + 30°C max. ²Sleeved cell.

Steeved cell. *Dependent upon current drain, temperature, cut-off and cell orientation. *Under 4 A / 0.1 second pulses, drained every 2 minutes at + 20°C from undischarged cells during 24 h, with 10 µA base current, yield voltage readings above 3.0 V after initial stabilisation. The readings may vary according to the pulse characteristics, the temperature, and the cell's previous history. Fitting the cell with a capacitor may be recommended in severe conditions or for high pulse currents. Consult Saft. *Operation above ambient temperature may lead to reduced capacity and lower voltage readings. Consult Saft. *For more severe conditions, consult Saft.



LSH 20

Primary Li-SOCI, cell



Dimensions in mm

2.0 6.6Ω/0.52 A 35Ω/100mA 250Ω/14.3mA 1.8 A 50Ω/71mA 10 15 Discharged capacity (Ah) Voltage plateau versus current and temperature (at mid-discharge) 4.0 Cell voltage [V] 3.0

2.5 2.0 0.001 Discharge current [A]

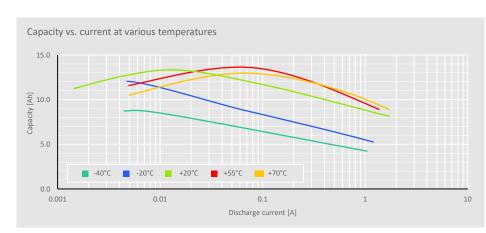
Storage

· The storage area should be clean, cool (preferably not exceeding +30°C), dry and ventilated.

Warning

- Fire, explosion and severe burn hazard.
- · Do not recharge, short circuit, crush, disassemble, heat above 100°C (212°F), incinerate, or expose contents to water.
- · Do not solder directly to the cell (use tabbed cell versions instead).
- · Do not remove the cells from their original packing before use.
- · Do not store the cells in bulk to avoid accidental short circuiting.
- · Do not mix new and used cells or cells from different origins.
- · Mind the polarities of the cell.





26, quai Charles Pasqua 92300 Levallois-Perret - France www.saft.com

Typical discharge profiles at +20°C

3.5

2.5

Cell voltage [V] 3.0

Saft, a subsidiary of TotalEnergies S.A.S. au capital de 26 724 876 € R.C.S. Nanterre 481 480 465

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