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		
	Alarm period	2 sec (±1) (Nominal)		
Output	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 reduct	ion: 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		

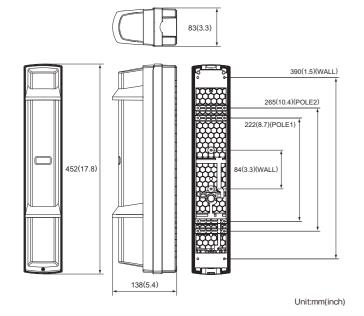
Specifications and design are subject to change without prior notice.

* 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)



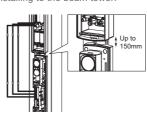
Extension Cable with Connector EC-4

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.



OPTEX CO., LTD. (ISO 9001 Certified / ISO14001 Certified) 5-8-12 Ogoto, Otsu, Shiga, 520-0101 Japan TEL+81(0)77 579 8670 FAX+81(0)77 579 8190 http://www.

OPTEX INCORPORATED (USA) OPTEX (EUROPE) LTD. (UK)

OPTEX SECURITY SAS (FRANCE) OPTEX KOREA CO., LTD. (KOREA) OPTEX SECURITY Sp. z o.o. (POLAND) http://www.optex.com.pl/ OPTEX (DONGGUAN) CO., LTD. SHANGHAI OFFICE (CHINA)

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http://www.optex-security.com/ http://www.optexkorea.com/ http://www.optexchina.com/

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



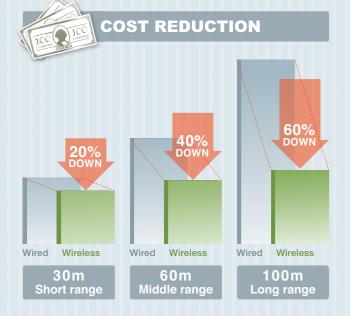
Revolution in the perimeter security industry.

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.











LONG BATTERY LIFE

Approx. 4 years Max. 10 years

Low current consumption

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



SL-350QFR

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

WIRELESS-READY

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.









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

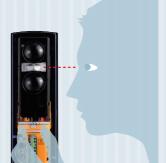
ensure stable performance. The actual performance of product is highly dependent on not only product quality but also installation quality.

SL-350QFR

Sniper viewfinder







Weather protection IP65

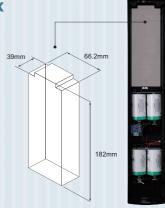


Smart line series are protected from interruption caused by insects, dirt sander or humidity.

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



From Tyco Security Products



Wireless PowerG Door/Window Contact with Auxiliary Input

PG4945

Features That Make a Difference:

- PowerG* robust industry leading commercial grade wireless technology
- Visible link quality LED indicator shown on device
- Option Configurable Auxiliary Input
- Fully supervised
- Compatible with PowerSeries Neo systems

The power of PowerG*:

The power behind PowerSeries Neo lies in various innovative technologies, including the revolutionary PowerG, which, bundled together, provide a robust and feature-rich platform designed to reduce operational costs for dealers and provide ultimate reliability for end users.

- Multichannel, Frequency Hopping Spread Spectrum technology - to overcome frequency blocking and interference
- Adaptive Transmission Power for battery life preservation
- High transmission ranges for reliable communication within up to 2km/2187 yards line-of-sight
- TDMA synchronized communication technology - to prevent message collisions
- 128 bit AES encryption high level protection against analysis tools and digital attacks



PG4945 Wireless PowerG Door/Window Contact with Auxiliary Input

The PG4945 Wireless PowerG Door/Window Contact with Auxiliary Input is installed on common intrusions points such as windows and doors to provide perimeter protection of the premise. The PG4945 is designed to communicate with the security system to report openings and closings of doors & windows. Known for its versatility and reliability, the PG4945 is an easy to install device ideal for a wide range of environments.

Easy to Install | Link Quality Indication

The PG4945 PowerG Door/Window Contact is equipped with a visible link quality LED indicator on the contact that lets the installer choose the optimal location for installation, eliminating the effort of going back and forth to the keypad. Additionally, device configuration is quick and easy with no hardware switches or need to re-open devices. All device configuration settings are handled on the system keypad.



Dependable and Versatile

The PG4945 contact features an auxiliary input that can be used to easily connect a standard hardwired contact. The auxiliary input can be configured to be Normally Open, Normally Closed or Single End-of-Line (4.7K Ohm). This feature is useful in installations where space is of a premium and

it is difficult to mount the magnet within the maximum allowable gap of the contact.

Specifications:

Approvals:

FCC/IC, UL/ULC

Please refer to www.dsc.com for the most current approval listings.

Compatibility:

PowerSeries Neo Systems

PowerSeries Neo is Security Redefined

PowerSeries Neo by DSC redefines intrusion security by combining the flexibility of a modular, hardwired system with the simplicity of a wide range of wireless devices and peripherals, resulting in the most comprehensive hybrid system available in the market today.

This brand new and exceptionally flexible platform leverages the superior capabilities of PowerG – the industry's leading-edge wireless intrusion technology. Innovative alarm verification solutions, together with an exceptionally comprehensive remote service software suite, make PowerSeries Neo the ideal first-class solution for residential and scalable commercial installations.



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°C/+85°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



Electrical characteristics	
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 characteristics ²	
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
FL	Flying leads
Other configurations upon request	



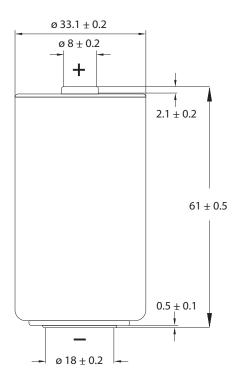


Steeved cell. *Dependent upon current drain, temperature, cut-off and cell orientation. *Under 4 A / 0.1 second pulses, drained every 2 minutes at + 20°C from undischarged cells during 24 h, with 10 µA base current, yield voltage readings above 3.0 V after initial stabilisation. The readings may vary 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. *Toperation 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

Voltage plateau versus current and temperature (at mid-discharge) 4.0 Cell voltage [V] 3.0 2.5

Discharge current [A]

35Ω/100mA

Discharged capacity (Ah)

50Ω/71mA 10

250Ω/14.3mA

15

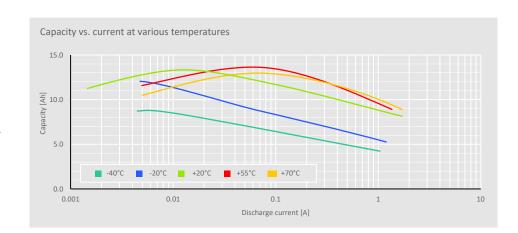
Storage

· 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

1.8 A

6.6Ω/0.52 A

3.5

2.5

2.0

2.0

0.001

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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