Smart Line™ Series

SL-100 TNR

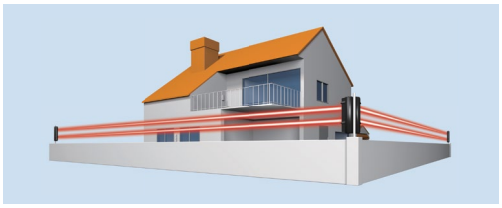
100ft (30m) Model

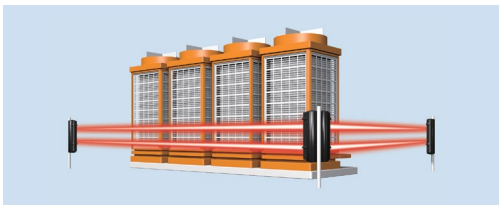
SL-200 TNR

200ft (60m) Model

HYBRID PHOTOELECTRIC BEAM SERIES

Active Infrared Protection with Flexible Power





The SL-TNR series offers a cost-effective and versatile solution for protecting a perimeter line up to 200ft long, where cabling is an issue or inconvenient.

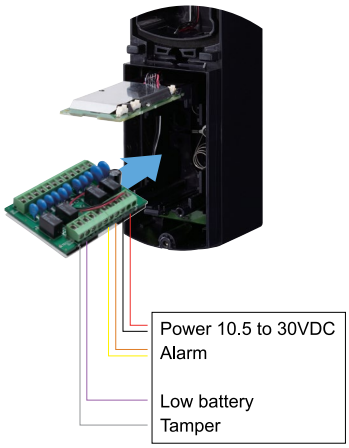
Ideal for small perimeters, flat roofs, and open areas, the active infrared dual beam set offers a lot of flexibility with its hybrid power options, where the transmitter is powered by Saft LSH-20 batteries, and the receiver can be hardwired.

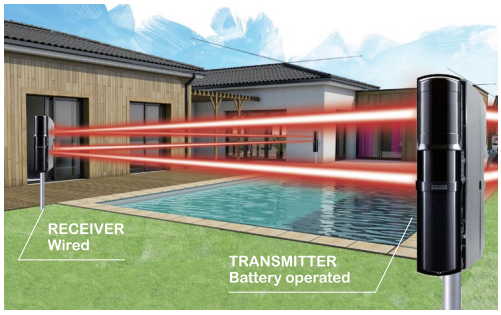
The SL-TNR series utilizes high-grade aspherical lenses and also has an anti-frost design with IP65 weather protection to improve its durability during harsh weather conditions.

GREAT FLEXIBILITY WITH POWER OPTIONS

HYBRID — Hardwired Receiver

For site configurations where one beam is close to a main power source but the other beam needs to be wireless. The SL-TNR offers the option to hardwire the infrared beam receiver with the included PCU-5 power converter.





WIRELESS — With High Density Lithium Batteries

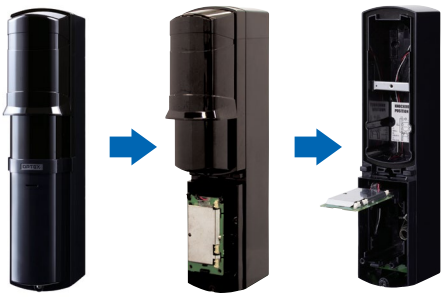
The SL-TNR series has been designed to work with D-size lithium batteries, and OPTEX recommends the Saft LSH-20 battery. Battery life expectancy is approximately 5 years when using LSH-20 batteries in both the transmitter and the receiver (4 batteries in total). LSH-20 batteries could also power the wireless transmitter when using the battery common unit BCU-5.

Battery-powered iSeries option available with powered by inovonics®

OTHER KEY FEATURES

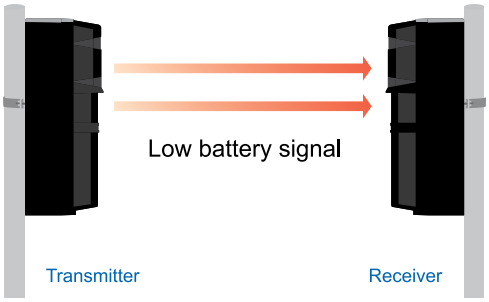
Simplified Battery Replacement

Batteries can be accessed easily without touching the main unit, eliminating the need to re-align the beams.



IR Communication for Low Battery Signal

The SL-TNR features an infrared communication between the transmitter and the receiver which signals the low battery status. It means that no wireless transmitter is necessary in the transmitter beam for this functionality. The system would only need one wireless transmitter on the receiver beam. If the customer would like to monitor the status of wireless transmitter's battery separately, a second wireless transmitter will be necessary on the transmitting beam.



WIRELESS-READY

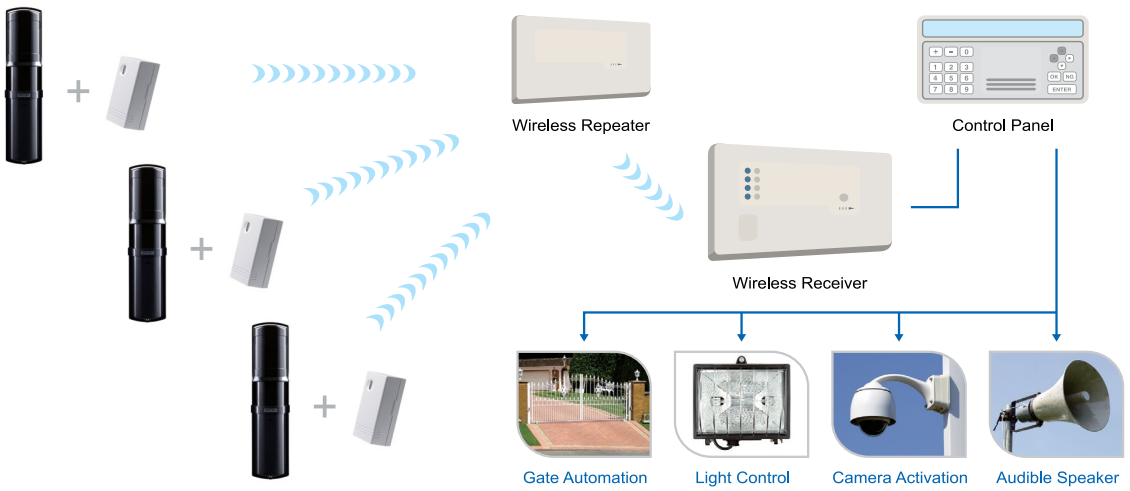
How to Add the SL-TNR to Your Wireless Enabled Alarm Panel

To easily connect a battery-powered SL-TNR to your wireless panel, please follow the steps below:

Use a two-input wireless door contact or universal wireless transmitter

1. Take one of your panel manufacturer's wireless transmitter
2. Register the wireless transmitter on the wireless alarm panel
3. Place the wireless transmitter in the SL-TNR's rear compartment (back box) and connect the alarm and tamper pair to the wireless transmitter
4. When the battery power of the SL-TNR is shared with the wireless transmitter, use the BCU-5 (optional)

A Whole Range of Applications Can be Triggered by the SL-TNR



INNOVATIVE MECHANICAL DESIGN

Sniper Viewfinder with 2X magnification

The new telescopic lens has a high level of visibility for optical alignment work.

SL-series Sniper view finder

Conventional model

Anti-frost main unit cover

The hoods prevent frost forming on active infrared beams.

Aspherical optical lens

The high grade aspherical lens creates more sharply defined and precise active infrared beams compered to ordinary fresnel lens.

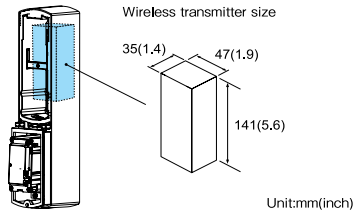
Vivid interior color

Easy to see vivid interior color for optical alignment.

Weather protection IP65

Rubber packing is used for all conceivable points where water or dust may penetrate, such as wiring holes and wire points.

Wireless transmitter storage space



Battery cover

Easy to access the battery holder and change batteries.

Basic Performances: ►Battery saving ►Beam interruption adjustment ►Form C (N.O./N.C.) alarm output

ACCESSORIES

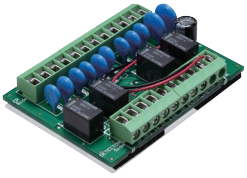
BCU-5 Battery Common Unit Included For iSeries

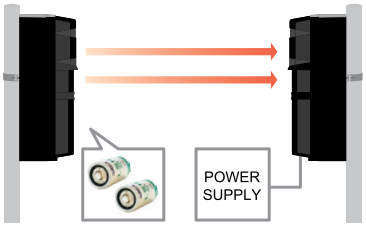
The BCU-5 allows sharing of power source and low-battery signals between the beam and the wireless transmitter.

Input voltage	3.2 - 4.0 VDC	
Current draw	Approx. 5 µA at 3.6 VDC (no load)	
Output voltage	Normal	Approx. 2.3 - 3.6 VDC
	Low battery	Approx. 2.0 - 2.6 VDC
Output current	100 mA (max.)	
Operating temperature	-20°C - +60°C (-40°F - +140°F)	
Operating humidity	95% (max.)	

PCU-5 Power Convert Unit Included for Hybrid

The PCU-5 is a voltage converter needed to hardwire the receiver and transmitter





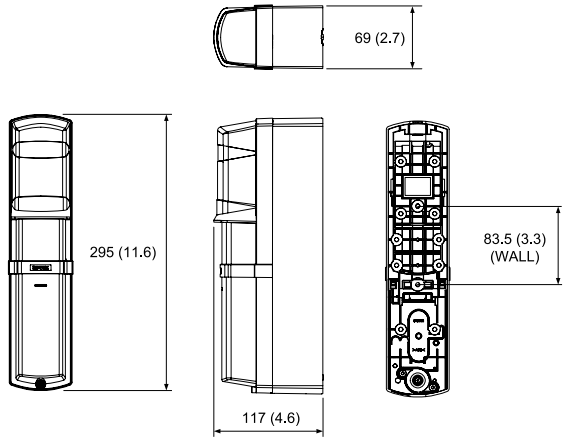
Power input	10.5 - 30 VDC
Current draw	80mA (max.)
Output voltage	Approx. 3.9 VDC
Output current	10mA (max.)
Alarm output	Form C relay ; 30VDC. 0.2A
Low battery output	N.C. relay ; 30VDC. 0.2A
Tamper output	N.C. relay ; 30VDC. 0.2A
Operating temperature	-20°C to 60°C (-4°F to 140°F)
Operating humidity	95% (max.)
Dimension	H×W×D mm (inch): 71 (2.8) × 53 (2.1) × 20 (0.8)

LSH-20 Saft D Size Lithium Battery

For iSeries: 2 Included per Side
For Hybrid: 2 Included for the Transmitter Unit

D cell 3.6V lithium battery

DIMENSIONS



Unit:mm(inch)

SPECIFICATIONS

Model			SL-100TNR / SL-100TNRI	SL-200TNR / SL-200TNRI
Maximum detection range			30 m/100 ft.	60 m/200 ft.
Maximum arrival distance			265 m/870 ft.	530 m/1740 ft.
Detection method			Twin infrared beam interruption detection	
Interruption time			Selectable from 50/100/250/500 ms (4 selections)	
Power source			3.6 to 3.9VDC D size lithium batteries Each Transmitter and Receiver: 2 units	
Current draw (stand by /at 25°C)	3.6 to 3.9 V DC size Lithium battery		Total: Approx. 500 µA Transmitter: Approx. 200 µA Receiver: Approx. 300 µA	Total: Approx. 600 µA Transmitter: Approx. 300 µA Receiver: Approx. 300 µA
Battery life * **	D size Lithium battery	Transmitter	Approx. 6 years	Approx. 5 years
		Receiver	Approx. 5 years	Approx. 5 years
Output	Alarm output		Form C-Solid State Switch: 3.9 VDC, 0.01 A	
	Alarm period		2 s (±1)	
	Low battery output		N.C. (Solid State Switch): 3.9 VDC, 0.01 A	
	Cover tamper output (Receiver)		N.C. (Solid State Switch): 3.9 VDC, 0.01 A Opens when the battery cover removed.	
Indicator LED	Alarm/ Level indicator (Receiver)		ON: Beam not received Blinking: Beam not received sufficiently OFF: Beam received	
	Power/ Low battery indicator (Transmitter and Receiver)		ON: Power ON Blinking: Voltage reduction OFF: Power OFF	
Operating temperature			-20°C to +60°C (-4°F to 140°F)	
Operating humidity			95 % (max.)	
Alignment angle			±90° Horizontal, ±5° Vertical	
Dimension			H x W x D mm (inch): 295 (11.6) x 69 (2.7) x 117 (4.6)	
Weight			1200 g (42.4 oz.) (Total weight of Transmitter + Receiver, excluding accessories)	
International protection			IP65	

iSeries (SL-100TNRi & SL-200TNRi) Only:

RF Module	Description	One-way binary RF Module
	Model	EN1941
	Manufacturer	INOVONICS
	Frequency option	902-928 MHz for North America 915-925 MHz for Australia 921-928 MHz for New Zealand

OPTEX
800.966.7839
sales@optexamerica.com
www.optexamerica.com
facebook.com/optexamerica
@optexamerica
linkedin.com/company/optex