



# Red Barrier

Make the invisible detection system by ATSUMI

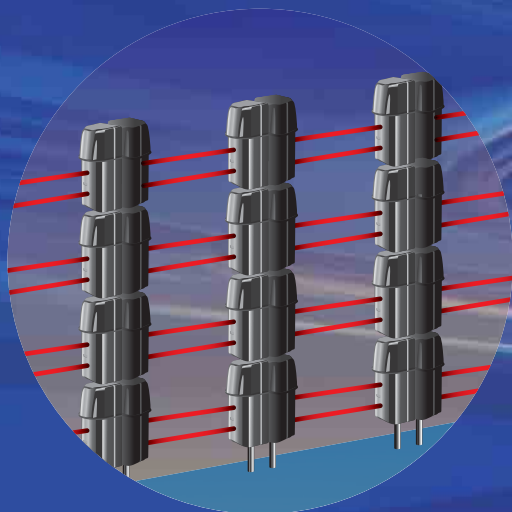
## PHOTOELECTRIC DETECTORS

NR30TS/NR30TM Outdoor 30m / Indoor 60m

NR60TS/NR60TM Outdoor 60m / Indoor 120m

NR90TS/NR90TM Outdoor 90m / Indoor 180m

# Advanced Security Technology



Four Units Stacking  
makes Beam Protection Curtain



## Reliable Photoelectric Dual Beam Detector

ATSUMI provides the highly reliable NRTS and NRTM series with the long experienced analog and CPU based Digital Technologies.

NRTS is the single channel model and NRTM is the Selectable Frequency 4 channels model with dual beams.

These series(6 models)cover the various applications requiring high level stability.

"Red Barrier" is the registered trademark of Atsumi Electric Co.,Ltd.



# Red Barrier Series NR30TS/60TS/90TS, NR30TM/60TM/90TM

## Features

### 1. Atsumi Originally designed Spherical Fresnel Lens

The high-grade spherical fresnel lens makes a sharply focused beam ray at long distance.

It achieves 100% sensitivity allowance and minimizes the unwilling reflection from wall, windows and so on.

And the optical alignment scope is integrated on this Lens, which enables precise alignment.

### 2. IP55 Precise Mechanical Protection Structures

The rubber O-Ring and the precise mechanical structures achieve IP55 which prevents rain, dust and insects from coming inside of the housing.

### 3. Selectable Frequency 4 channels (NRTM only)

NRTM model enables stacking application up to 4 units without interference between them.

This feature covers the various applications which require high grade protection.

\* Note: Please check manuals for the stacking application as there are some restrictions.

### 4. EDC (Environmental Discrimination Circuit) (NRTM only)

When the beam reception level is severely dropped in heavy fog, snow, rain and dust, the unwanted alarm may be caused sometime.

EDC function outputs EDC signal before alarming and gives you a caution. This is very useful in harsh environment or to maintain the alarm systems.

### 5. Easy Optical Alignment

Three alignment methods are available and they achieve quick and easy installation.

- (1) For the initial rough alignment, the scope is useful.
- (2) For the fine alignment, LED shows alignment condition.
- (3) For the other fine alignment, Voltage output for the volt-meter allows precise alignment.
- (4) Mechanically, the vertical alignment screw are useful for fine adjustment.

### 6. Other features

- \* AGC (Automatic Gain Control)
- \* Adjustable beam interruption time
- \* Dual beams offer stable operation.
- \* 99% beam loss is allowed.
- \* High grade plastic and metal material achieve long-term usage.

## NRTS / TM Specifications

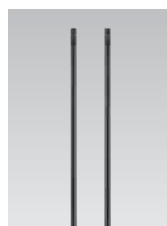
Model	NR30TS/60TS/90TS	NR30TM/60TM/90TM
Input voltage	DC10.5V~28V NO-Polarity	
Current draw	Tx:15mA/27mA/38mA, Rx:24mA	Tx:15mA/24mA/31mA, Rx:64mA
Operating temperature and humidity	-25°C~+55°C RH95% or less	
Storage temperature and humidity	-30°C~+65°C RH95% or less	
Protection range	30m/60m/90m(outdoor), 60m/120m/180m(Indoor)	
Sensitivity allowance	100 times	
Interruption time	50msec~700msec	50msec~900msec
alignment angle	Horizontal: ±90° : Vertical: ±5°	
Auto gain control	Available	
Channel	1ch	Selectable Frequency 4ch
Alarm	1c, DC30V, 0.1A, Retention time 1 Sec.	
Tamper	1b, DC30V, 0.1A, While the cover is opened.	
EDC	N/A	1b, DC30V, 0.1A, Retention time 1 Sec.
Indicators	Power	Tx : LED lights when the power is ON.
	Alarm	LED lights when the alarm outputs.
	EDC	N/A LED lights when the EDC outputs.
Optical alignment	Rough	Scope
	Fine	LED lights according to the beam power
	Fine	Voltage output for the voltmeter
IP rate	IP55	
Dimensions	W77xH177xD83	
Weight	760g(Tx, Rx total)	
Color	Black, Munsell approx. N1.0	
Standard	CE, RoHS, CCC	

## Optional Accessories



**BP-1**

Metal Pole (2pcs.)  
H: 3' 1" (950mm),  
D: 1 3/4" (43mm)



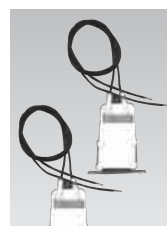
**BP-2**

Metal Pole (2pcs.)  
H: 3' 11" (1200mm),  
D: 1 3/4" (43mm)



**BP-3**

Wall Mount Pole (2pcs.)  
H: 16 9/16" (420mm),  
D: 1 3/4" (43mm)

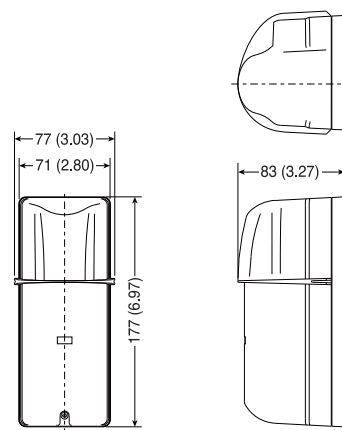


**BH12T**

Heater (2pcs)  
For use in cold and frosty environment.

## Dimensions

mm (inch)



**ATSUMI ELECTRIC CO., LTD.**

4-2-2 Shin-Miyakoda kita-ku, Hamamatsu, Shizuoka 431-2103 Japan

Phone: +81-53-428-4116 Fax: +81-53-428-4119

E-mail: international@atsumi.co.jp

Website: <http://www.atsumielectric.com>

