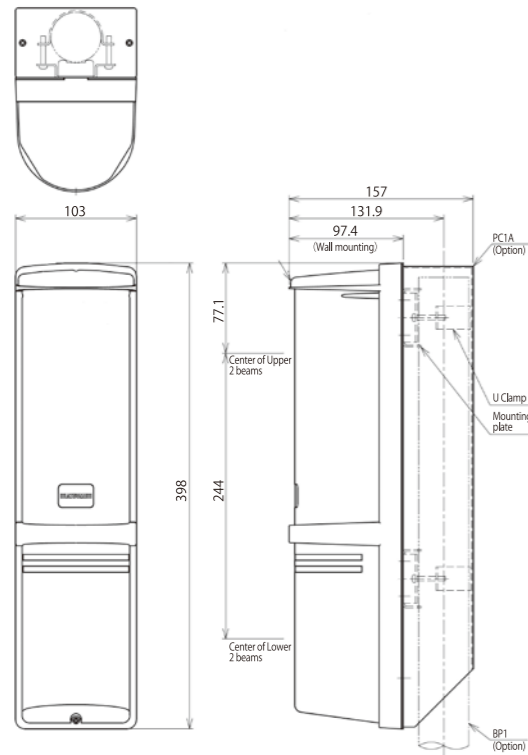


## Specifications

Model		NR60AQS	NR120AQS	NR200AQS	NR60AQM	NR120AQM	NR200AQM
Power	Input voltage	DC10.5V~28V					
	Current draw	90mA	95mA	100mA	120mA	124mA	128mA
Temp & humid	Operation temp & humid	-25°C~+60°C RH95% or less					
	Storage temp & humid	-30°C~+70°C RH95% or less					
Beam	Detection range outdoor Available for both AND / OR mode	60m	120m	200m	60m	120m	200m
	Maximum arrival distance Available for both AND / OR mode	600m	1200m	2000m	600m	1200m	2000m
	Frequency selection	1ch			2 Group x 4 Channels		
	Sensitivity allowance at outdoor range	100 times					
	Beam modulation	Dual Modulation					
	Interruption time	40~500msec					
	Optical module	Horizontal:±90° / Vertical:±10°					
	Auto gain control	Available					
Output	Alarm output	Form	Form 1c (Non-voltage contact)				
		Period	2 Seconds				
		Contact capacity	DC30V, 0.2A (Resistor load)				
		Resistor	3.0Ω or less				
	Tamper output	Form	Form 1b (Non-voltage contact)				
		Period	Open when Cover is open				
		Contact capacity	DC30V, 0.1A (Resistor load)				
		Resistor	3.0Ω or less				
	EDC output	Form	Form 1b (Non-voltage contact)				
		Period	Open when EDC working				
		Contact capacity	DC30V, 0.2A (Resistor load)				
		Resistor	3.0Ω or less				
Mechanical structure	Mount	Wall or pole (φ38mm~φ42.7mm)					
	IP rate	IP66					
	Dimension	W103×H398×D99					
	Weight	Tx: 1.2kg Rx: 1.2kg					
	Color	Black / Munsell N1.0					

## Dimensions

with PC1A pole cover(option)



## Accessories

Heater : ATC (Auto temperature control) keeps temperature in good condition around Optics.



**BH12T**  
Heater(2pcs)  
For use in cold  
and frosty environment.



**PC1A**  
Pole Cover(2pcs)  
For aesthetically  
pleasing installation



**PC3A**  
Back-to-back Enclosure  
For aesthetically  
pleasing installation



**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)

 **Red Barrier**  
**ATSUMI** Make the invisible detection system by ATSUMI

## PHOTOELECTRIC DETECTORS

NR60AQS / NR60AQM Outdoor 60m / indoor 120m  
NR120AQS / NR120AQM Outdoor 120m / indoor 240m  
NR200AQS / NR200AQM Outdoor 200m / Indoor 400m

Advanced Perimeter Protection  
by Quad Beam detectors



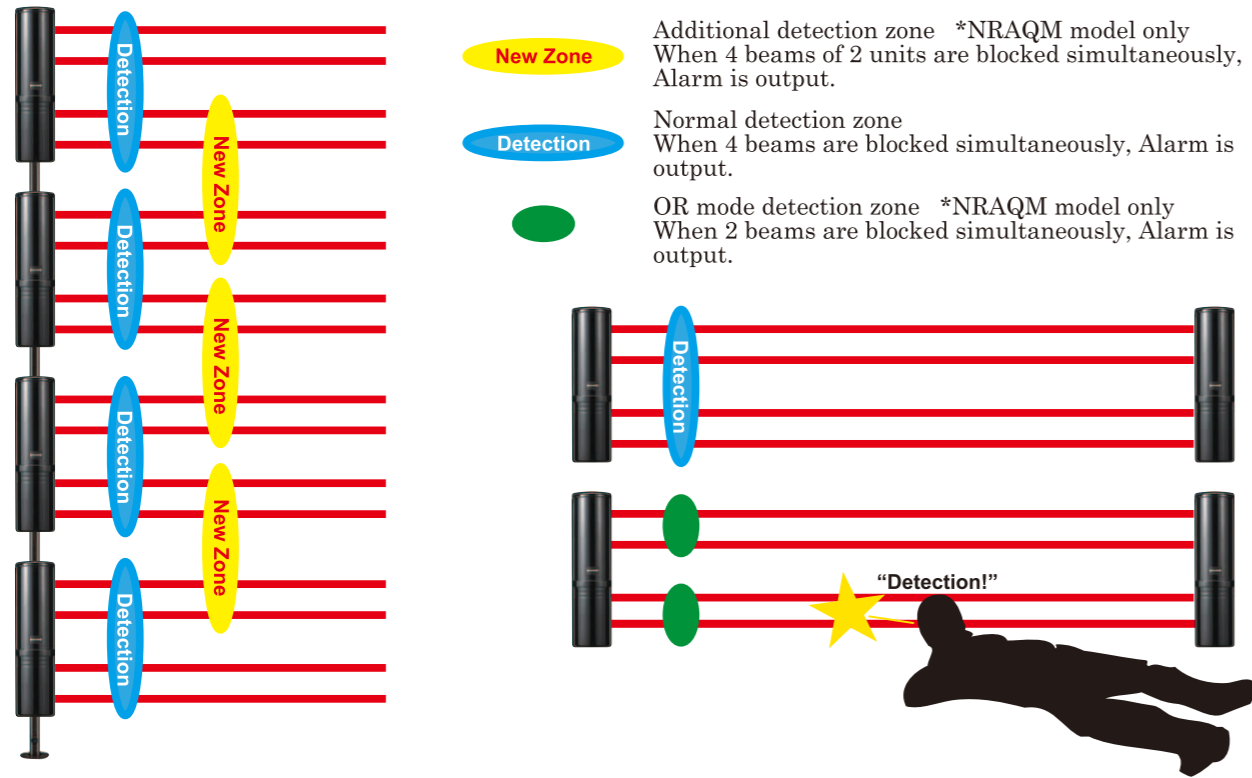
 **ATSUMI ELECTRIC CO., LTD.**  
4-2-2 Shin-Miyakoda kita-ku, Hamamatsu, Shizuoka 431-2103 Japan  
Phone:+81-53-428-4116 Fax:+81-53-428-4119  
E-mail:international@atsumi.co.jp  
Website:http://www.atsumielectric.com

● **HD AND (High Density AND) mode for the multi-stacking application \*NRAQM model only**

NEW zone is added which is AND mode between [Lower 2 beams of Upper Unit] and [Upper 2 beams of Lower Unit] can make the high density protection. There is no function on the conventional detectors. This function also allows to arrange the distance between the stacking units.

● **AND or Anti-crawl (OR) mode selection \*NRAQM model only**

AND : When Four beams are blocked simultaneously, an alarm is activated.  
 OR (Anti-crawl) : When Upper or Lower two beams are blocked simultaneously, an alarm is activated. The various application is achieved with the maximum range 200m outdoor as OR mode is available with 200m outdoor.

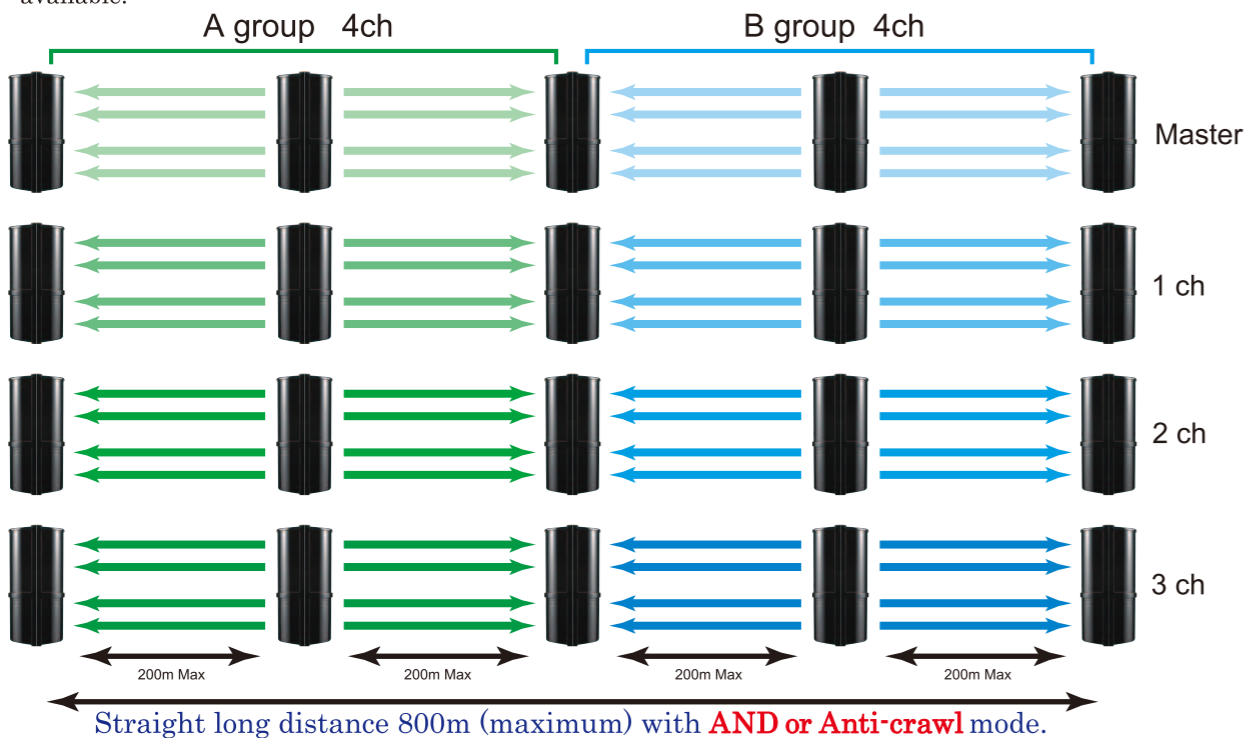


● **MSDC (Multi Signal Discrimination Circuit) \*NRAQM model only**

The transmitter emits modulated beams and the receiver can acknowledge and select the signal from the own transmitter by the high tech MSDC.

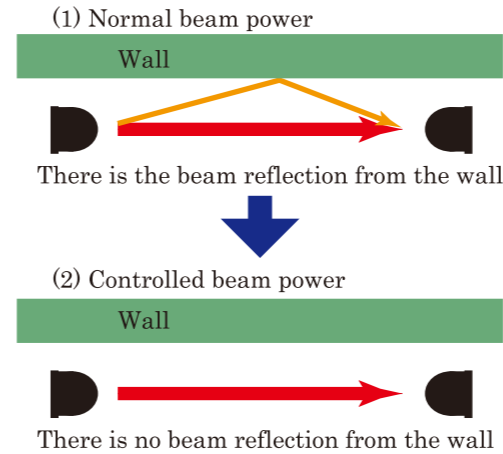
MSDC enables

- 1) No synchro-wires between Transmitter and Receiver without cross-talk between other detectors,
- 2) A and B groups with 4 channels, total 8 channels. When Anti-crawl (OR) mode is selected, 16 channels are available.



● **BPC (Beam Power Control)**

The beam power of the transmitter is adjustable. The suitable reception beam power in each installation range are required to prevent reflection on nearby walls or cross talk with other detectors. The receiver adjusts the receiving level automatically.



● **High IP (Ingress Protection) rate**

IP 66 protects from harsh environment (rain, snow, dust, bug, etc.).

● **100 times Sensitivity allowance (10 times Maximum arrival distance)**

100 times Sensitivity allowance maintains the stable operation even if 99% of beam power is lost by fog, snow, rain, and etc. On the other hands, the protection range can be extended under the clean environment like indoor as the the sensitivity allowance can be lower.

● **Unique Knockout structure**

IP66 is kept when the knockout parts are removed for the wall surface wiring.

● **Superior Fresnel lens**

Superior focusing at long distance. Rust or Fog free as No Mirror optics used. Makes ideal beam shape for long distance.

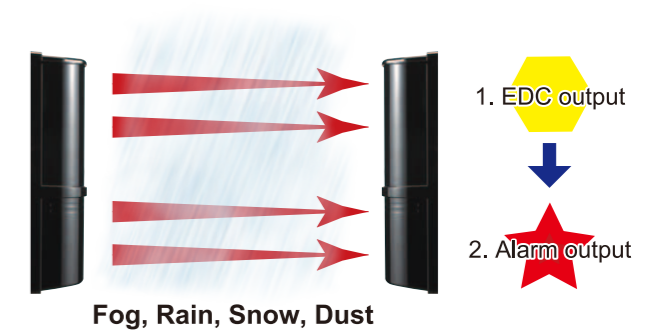


● **Pole mount bracket**

Hold the units firmly on the pole without any affection to the detector's functions.

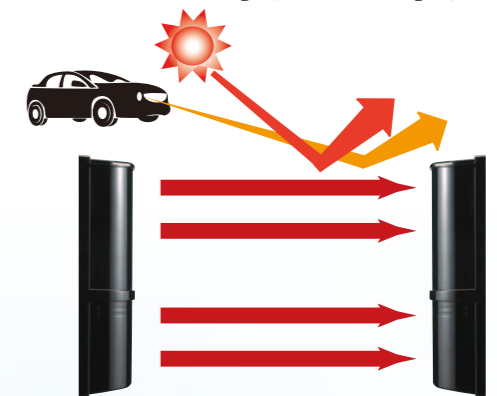
● **EDC (Environmental Discrimination Circuit)**

EDC is output when the beam reception level is severely dropped in heavy fog, snow and rain before the alarm is output. EDC is very useful for the stable monitoring operation as EDC and the alarm signals are distinguished. Output sequence 1)EDC is output, and then 2)Alarm signal is output. It tells you the environmental condition which may not cause the real Alarm.



● **DMB (Dual Modulated Beam)**

DMB technique is developed to eliminate the external interference from Electrical noise, Sunlight, Car head light, etc.



**Easy optical alignment**

● **Integrated Scope on the lens**

Scope shows the precise position of the target as it is integrated on the lens, and has clear and fine visibility of target.

● **High visibility Level LED**

Level LED indicates status of the alignment by changing flushing time of light.

● **Voltage output for fine alignment and maintenance**

It is easy to know the beam power and receiving condition by measuring it.

● **No screwdriver needed**

Adopt the hand screw and it carries out simple and easy optical alignment to the horizontal and vertical direction.

● **Horizontal Turn table**

It is for large angel adjustment.

● **No Beam blocking plate needed**

The conventional model requires a beam blocking plate for upper or lower optical alignment. This model adopts the upper/lower independent adjustment method.