

Features:

- 1. Long sensing range (30/60 meters outdoors)
- 2. Multi frequency (4 channels selectable)
- 3. Heater available (optional)
- 4. Aluminum housing/PC Resin anti-UV cover ABS side caps
- 5. AGC circuits; Anti high-low temperature, fog, rains
- 6. 2 or 4 or 6 or 8 beams separate photoelectric beam sensors, programmable trigger on simultaneous breaking of any single, or 2 adjacent beams/or 2 adjacent beams broken only--selectable by JP2 on Rx's side cap.
- 7. Terminal block wiring connection
- 8. Alarm trigger: Break one or two adjacent beams
- 9. N.C./N.O./COM relay output
- 10. Mounting hardware included.
- 11. No synchronizing wires required.
- 12. Built in beam alignment led indicator.
- 13. Built in beam alignment buzzer (beep sound).
- 14. Built in tamper switches (left/right side caps of both Tx & Rx)

Sensing Rage	Outdoors: 30/60 metersIndoors: 60/120 meters		
Beams	2x 2 beams/2x 4 beams/2 x 6 beams/2 x 8 beams		
Detection Method	1. Any 2 (2 X 2) adjacent beams at the same time; relay trigger immediately		
<u>(JP2)</u>	2. Any each (1x2) beams broken for more than		
	2 seconds; Then relay trigger		
	***(Remove JP2; one beam broken relay trigger function cancelled)		
4 Channels selectable	(SW1): Multi frequency function (4 channels selectable) available		
Signal output	N.C./N.O./COM relay output		
Response time	(SW2): 120/240/360/480 msec (selectable, by SW1)		
Delay time of relay	1 second		
Relay capacity	1A/120VAC; 1A/24VDC		
Wiring connection	By terminal block		
Power led indicator	Green led on: Powered, Green led off: Power off		
Beam alignment indicator	Built in red led indicator for beam alignment		
	On: Beam aligned proper, off: Beam broken or power off		
Beam alignment buzzer	Built in beam alignment buzzer		
<u>(JP1)</u>	Beep sound on: Beam broken or beam alignment failed		
	Beep sound off: Beam aligned or power off		
Heater	Heater available (optional)		
Tamper switches	4 pcs; on left/right side caps for both Tx & Rx		
Environment Temp.	-45 ~55 (-49 ~131)		
Engress Protection	IP-65		
Humidity	95%		
Dimensions:	50 (W) X 53.5 (H) X (635/1,095/1,555/2,015) (H) mm		

Swivel housing; side caps easy for beam alignment !!!

How the relay (alarm) will be triggered ?

For example of BS-400X0 (4 X 2 beams): (a+b)=Beam 1, (c+d)=Beam 2 ,(e+f)=Beam 3 (g+h)=Beam 4, So, BS-400X0 is 8 beams actually !

BS-200X0 is 4 beams, BS-600X0 is 12 beams, BS-800X0 is 16 beams actually.

One beam broken:		2 adjacent beams broken:	
Cut any of (<u>a+b</u>) or (<u>c+d</u>) or (<u>e+f</u>)		Cut (a+b+c+d) or (c+d+e+f)	
<mark>or</mark> (<u>g+h</u>) beams (any of Beam 1 or 2		or (<u>e+f+g+h</u>) at the same	
or 3 or 4 beams) for more than 2 seconds;		time; then the relay (alarm)	
then relay (alarm) trigger		trigger immediately.	
	Beam 1 =(a+b)		Beam 1 =(a+b)
	2		-(u i w)
	Beam 2		Beam 2
	=(c+d)		=(c+d)
	Beam 3		Beam 3
	=(e+r)		=(0+1)
	Beam 4 =(a +h)		Beam 4 =(a+h)
	(g)		(3)



Consumption current & total beams:

Model No.	Consumption current (Heater Off)	Consumption (Heater On)	Total Beams
BT-200 <mark>3</mark> 0	130 mA	250 mA	4
BT-200 <mark>6</mark> 0	140 mA	260 mA	4
BT-400 <mark>3</mark> 0	260 mA	380 mA	8
BT-400 <mark>6</mark> 0	280 mA	400 mA	8
BT-600 <mark>3</mark> 0	390 mA	510 mA	12
BT-600 <mark>6</mark> 0	420 mA	540 mA	12
BT-800 <mark>3</mark> 0	520 mA	640 mA	16
BT-800 <mark>6</mark> 0	560 mA	680 mA	16





