

TECHNICAL DATA SHEET



NOVA PFC-S (Dry Contact Sensor)

IP20

8m

360°

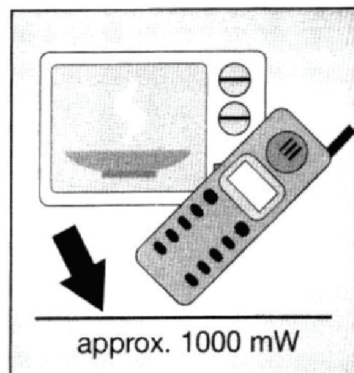
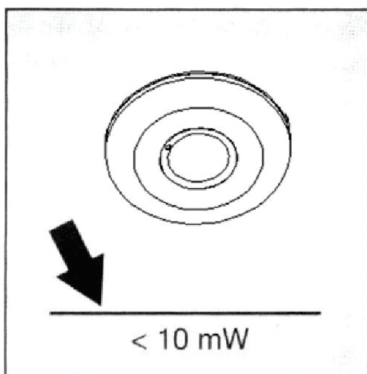


The sensor is an active motion detector, it emits high-frequency electro-magnetic wave (5.8GHz) and receives their echo. The sensor detects the change in echo from even the slightest movement in its detection zone. A microprocessor then triggers the "switch light ON" command. Detection is possible through doors, panes of glass or thin walls.

Important: Persons or objects moving towards the sensor are detected best !

TECHNICAL SPECIFICATION

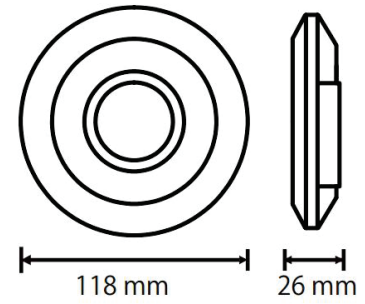
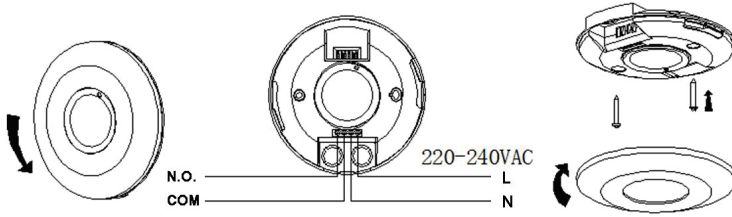
Power supply:	220-240VAC
Power frequency:	50/60Hz
Installation site:	Indoors, Ceiling mounting
HF system:	5.8GHz CW radar,ISM band
Transmission power:	<10mW
Current:	MAX.7A
Power consumption:	<0.5W
Detection angle:	360°
Reach:	max.8m (radius), adjustable
Time setting:	8sec/ 3min/ 8min/ 12min, adjustable
Light Control:	10lux/ 20lux/ 30lux/ 2000lux
Output:	Dry contact



NOTE: The high-frequency output of this sensor is <10Mw- that is just one 100th of the transmission power of a mobile phone or the output of a microwave oven.

CONNECTION WIRE DIAGRAM APPLICATION

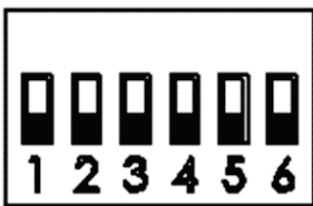
PRODUCT CUT-OUT DIAGRAM



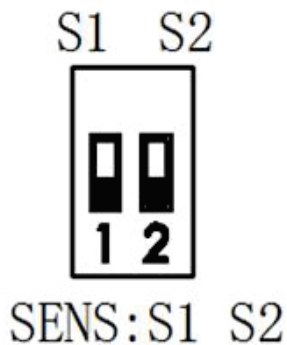
Important: Connection must be done by an electrician or a specialist.

- This product is using microwave motion detection function to give dry closing contact signal for the controlled system (this signal is passive dry closing contact signal only.)
- This product has a built-in daylight function, and different detection rang, hold time, daylight threshold options for customer to choose by dip switches.
- When connecting the application unit to N.O. and COM, the unit is off when there is no motion detected; and goes on when motion is detected.

CALIBRATION

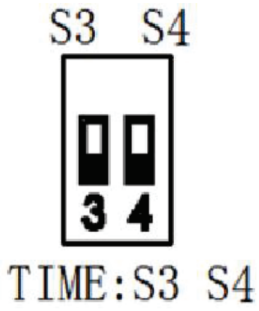


Specifications Setting: Consider the picture. S1, S2 set lux , S3, S4, set time S5, S6, set the sensitivity.



Light-control Setting:The chosen light response threshold can be infinitely from approx.10lux-30lux. Switch to the on is "1", switch to the off is "0"; he corresponding file of switch location and detection distance as follow:

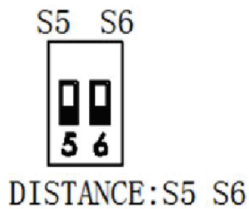
S1	S2	LUX	S1	S2	LUX
1	1	DAY	0	1	20LUX
1	0	30LUX	0	0	10LUX



Time Setting: Time can be set 20s to 10min. Any movement detected before this time elapse will re-start the timer. It is recommended to select the shortest time for adjusting the detection zone and for performing the walk test. Switch to the on is "1", switch to the off is "0"; the corresponding file of switch location and detection distance as follow

S3	S4	TIME	S3	S4	TIME
1	1	8S	0	1	3MIN
1	0	8MIN	0	0	12MIN

NOTE: after the light switches OFF, it takes approx. 1sec before it is able to start detecting movement again. The light will only switch on in response to movement once this period has elapsed.

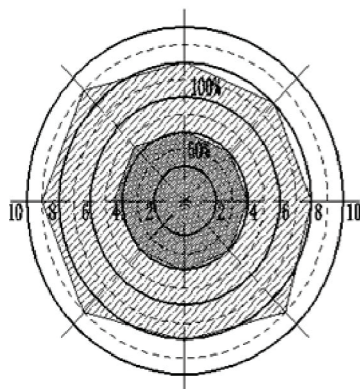


S5	S6	DISTANCE	S5	S6	DISTANCE
1	1	20%	0	1	50%
1	0	75%	0	0	100%

NOTE: The above detection distance is measured using a person who is between 1.6m~1.7m tall with an average build, moving at a speed of 1.0~1.5m/sec. if any of these variables are changed, the detection distance will also resultantly change.

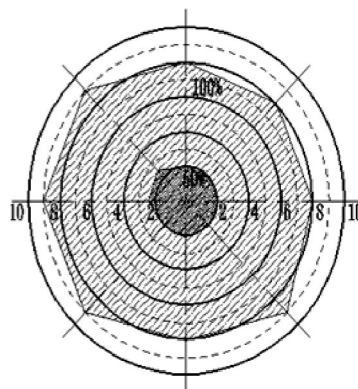
Ceiling installation height: 2.5m

Detecting range setting: 100%/ 50%



Ceiling installation height::3m

Detecting range setting:100%/50%



TROUBLESHOOTING

Malfunction	Cause	Remedy
The load will not work	Wrong light-control setting selected Load faulty Mains switch OFF	Adjust setting Change load Switch ON
The load is always on	Continuous movement in detection zone	Check zone setting
The load is ON without any identifiable movement	The sensor not mounted for detecting movement reliably Movement occurred, but not identified by the sensor (movement behind wall, movement of a small object in immediate lamp vicinity etc.)	Securely mount enclosure Check zone setting
The load will not work despite movement	Rapid movements are being suppressed to minimize malfunctioning or the detection zone you have set is too small	Check zone setting.

