



Save Energy and Money
Remain Secure

PIR Motion Sensors & Switches



www.energysavingsensors.com

PIR MOTION SENSORS / ENERGY SAVING SENSORS / MICROWAVE SENSORS

The PIR Sensor Switch can detect the Infrared Rays released by human body. The light or any other electrical appliance can be activated automatically by the active presence of a human body within the detection range / coverage area & when there is no presence the light will be deactivated automatically.

PIR Motion Sensor for Automatic Light Control

PIR Motion Sensor is a fully automatic indoor and outdoor security / courtesy light controller capable of controlling up to 2000W incandescent or 30W x 20 fluorescent of lighting in day as well as at night. The built-in Passive Infrared (PIR) Motion Sensor turns on the connected lighting system when it detects motion in its coverage area. During the day, the built in Photocell Sensor saves electricity by deactivating the lights. You can reduce your electricity bills by using PIR Motion Sensors & Occupancy Sensors.

An adjustable time knob lets you select how long the light stays on after activation & thus stops the wastage of electricity. In the evening or at night, you can also manage at what time the lights should become ON by the LUX adjustment knob provided in the Sensor.

Energy Saving Sensor:

By the use of PIR Sensor, considerable energy can be saved by switching off the lights when the space is not in use. Savings are huge in larger facilities.

It has been estimated that a single unit of energy saved at the end use point is equal to 2.3 units of energy produced.

If energy efficient methods are implemented properly about 25000 MW equivalent capacity of power can be saved through promotion of energy efficient measures.

PIR Motion Sensor for Security of Houses

If PIR Motion Sensor is installed in front yard or back yard of your house, it works as Security Sensor in nights. As if any body jumps or sneaks within its detection range, the connected lights / Sirens or beeps can be activated automatically to create Panic to the Intruder.

Working Principle: -

- The PIR Sensor senses the motion of a human body by the change in surrounding ambient temperature when a human body passes across.
- Then it turns on the lighting load to which it is connected.
- The lighting load will remain ON until it senses motion.
- Once the motion is seized it switches OFF the lighting load.
- During the night, the LUX adjustment knob allows you to adjust the luminosity based on which the lighting load will either switch on / off automatically.

Applications: -

- Common toilets, for lights & exhaust fans
- Common staircase / Entrance / Basements
- Parking areas / garden lights
- Living room, Malls, ATMS
- Changing rooms in shops
- Offices / Conference Room
- Corridors & many more!

Advantages: -

- PIR Motion Sensors will itself recover its cost by reducing your electricity bills and will further save your electricity cost for the future.
- Very easy installation and can be installed by in – house technician itself.
- No separate wiring is required hence no additional installation cost.
- No modification is required and complies with current aesthetics.
- Pay back within ten months according to residential meter and six months according to commercial meter.

APPROXIMATE SAVING WITH COST ESTIMATE :

S. No.	For Commercial Meter	Without PIR Motion Sensor	With One PIR Motion Sensor
1.	Power capacity of total connected light's load	2000 watts	2000 watts
2.	Operational hours of connected light's load	12	6
3.	Total consumption in watts per day	24000	12000
4.	Number of days in a month	30	30
5.	Total power used by connected light's load in KW	72000W=720 KW	36000W=360 KW
6.	Cost of electricity per KW in Rupees	10	10
7.	Amount paid per month @ Rupees 10 per unit	7200.00	3600.00
8.	Saving per month on connected light's load in Rupees	0	3600.00

***For higher wattage electrical appliances the saving will be much more accordingly**



APPLICATIONS OF VARIOUS SENSORS IN BUILDINGS

Company Profile

HIGHLY COMPONENTS PVT. LTD. established in 1997 is an associate concern of **M/S. HAMILTON ELECTRONICS PVT. LTD.** which is the leading company in the field of Security related products in India. The company has achieved an unrivaled position in the market by introducing PIR Motion Sensors for automatic control of lights apart from other Security Sensors. The company is offering to its customers the innovative and best quality products at most competitive prices with exceptional sales – service through nation wide network. The company is committed to provide total satisfaction to its customer.

To view complete range of sensors & other products, visit our following websites :

- www.energysavingsensors.com
- www.pirsensors.com
- www.hamiltonindia.com

PIR MOTION SENSORS / ENERGY SAVING SENSORS / MICROWAVE SENSORS

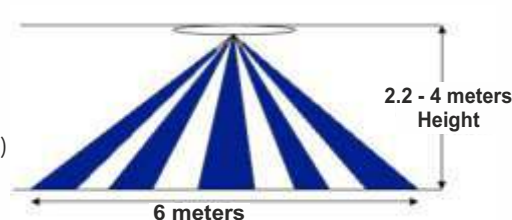
360° CEILING MOUNT PIR MOTION SENSOR, MODEL: HC-7BN



SPECIFICATIONS

- Power Source : 220 ~ 240VAC / 50Hz
- Detection Angle : 360°
- Rated Load : Max.1200W (incandescent)
300W (fluorescent)
- Detection Distance : Max.6m (<24°C)
- Time Delay : 10sec±3sec to 7min±2min(adjustable)
- Ambient Light : <3-2000LUX(adjustable)
- Detection Motion Speed : 0.6-1.5m/s
- Installation Height : 2.2m - 4m
- Protection Class : IP 20
- Maximum Size : Ø 115mm X 58mm

DETECTION PATTERN



APPLICATIONS • Main Entrance • Toilet / Pantry • Stairways / Lifts / Lobby • Covered Parking Area • Lockers Room / Trial Rooms • Office / ATM / Malls • And Many More

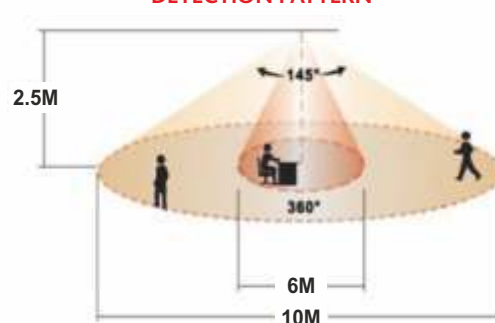
360° FLUSH CEILING MOUNT OCCUPANCY SENSOR, MODEL-HC-21



SPECIFICATIONS

- Power Source : 220 ~ 240VAC / 50Hz
- Rated Load : 2,000W for halogen & incandescent
1,500W for fluorescent
- Detection Angle : 360°
- Detection Range : 6m for micro motion at 25°C
10m for walk across motion at 25°C
- @2.5m height
- Run-on time setting : 5 sec. ~ 40 min.
- Ambient light setting : 30 ~ 200 Lux.
- Smart Relay : Yes (Ver2.0+)
- Working temp. : -10°C ~ +40°C
- Power consumption : 1W maximum
- Installation Height : 2.5m - 5m
- Max. Size (dia.*D) : Ø 86mm X 85mm depth

DETECTION PATTERN



APPLICATIONS • Office • Cabins • Conference Hall • Meeting Rooms • And Many More

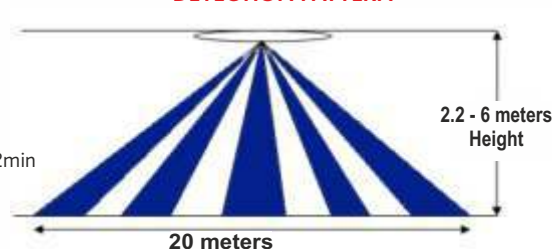
360° CEILING MOUNT OCCUPANCY SENSOR, MODEL-HC-22



SPECIFICATIONS

- Power Source : 220 ~ 240VAC / 50Hz
- Detection Angle : 360°
- Detection Distance : 20m max(<24°C)
- Working Temperature : -20~+40°C
- Ambient Light : <3-2000LUX (adjustable)
- Time Delay : Min.10sec±3sec, Max. 30min±2min
- Power Consumption : approx 0.5W
- Rated Load : Max.2000W for incandescent
1000W for fluorescent
- Installation Height : 2.2-6m
- Max. Size : 105mmx105mmx60mm

DETECTION PATTERN



APPLICATIONS • Office Cabins • Conference Rooms • Meeting Halls • Corridors • And Many More

MICROWAVE MOTION SENSOR, FLUSH TYPE, MODEL: HC-21M



SPECIFICATIONS

- Power Source : 220 ~ 240VAC / 50Hz
- Detection Angle : 360°
- HF System : 5.8GHz CW radar, ISM band
- Transmission Power : <0.2mW
- Rated Load : Max.1200W(incandescent lamp)
300W (energy-saving lamp)
- Detection Distance : 1-8m (radius), adjustable
- Time Delay : 10 sec±3 sec to 12min±1min(adjustable)
- Ambient Light : <3-2000LUX(adjustable)
- Installation Height : 1.5-3.5m
- Power Consumption : Approx.0.9W
- Max. Size : Ø 76mm X 76mm

DETECTION PATTERN



APPLICATIONS • Office • Cabins • Conference Hall • Trial Rooms • And Many More

360° CEILING SURFACE MOUNT OCCUPANCY SENSOR WITH IR REMOTE CONTROLLER, MODEL-HC-26

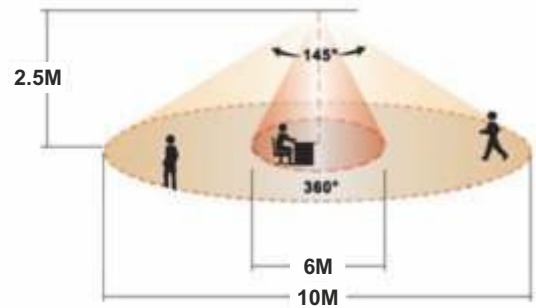


MODEL : HC-26

SPECIFICATIONS

- Power Source : 220 ~ 240VAC / 50Hz
- Rated Load : 2,000W for resistance
1,000W for fluorescent
- Detection Angle : 360°
- Detection Range : 6m for micro motion
@2.5m height : 12m for walk across motion
- Run-on time setting : 5 sec. ~ 15 min.
- Ambient light setting : 10 ~ 500 Lux.
- Operation Mode : Auto/On/Off
- Smart Relay : Yes
- Working Temp. : -10°C ~ +40°C
- Power Consumption : 1W maximum
- Installation Height : 2.5m - 3.5m
- Max. Size (dia.*D) : Ø 125mm X 75mm

DETECTION PATTERN



APPLICATIONS • Office • Cabins • Conference Hall • Meeting Rooms • And Many More

ENERGY SAVING SMART SWITCH / FLUSH MOUNT WALL SWITCH, MODEL: HC-7CN

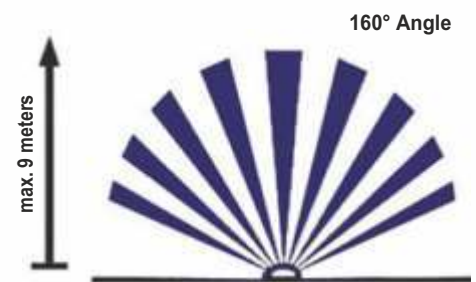


MODEL : HC-7CN

SPECIFICATIONS

- Power Source : 220-240V AC / 50Hz
- Detection Angle : Max. 160°
- Rated Load : Max.500W (incandescent)
Max.200W (fluorescent)
- Detection Distance : Max.9m(<24°C)
- Time Delay : 10sec±3sec to 7min±2min(adjustable)
- Ambient Light : < 3-2000LUX (adjustable)
- Installation Height : 1-1.8m
- Protection Class : IP 20
- Maximum Size : 80mm X 80mm X 45mm

DETECTION PATTERN



APPLICATIONS • Rest Room / Office Cabins • Lockers / Stairways • Lifts / Toilets • Main Entrance • And Many More

WALL MOUNT PIR MOTION SENSOR, MODEL : HC-7D



MODEL : HC-7D

SPECIFICATIONS

- Power Source : 220-240V AC / 50Hz
- Detection Angle : 180°
- Rated Load : Max.1200W (incandescent)
300W (fluorescent)
- Detection Distance : max.12m (<24°C)
- Time Delay : 10sec±3sec to 7min±2min(adjustable)
- Ambient Light : <3-2000LUX(adjustable)
- Detection Motion Speed : 0.6-1.5m/s
- Installation Height : 1.8-2.5m
- Protection Class : IP 44
- Max. Size : 100mm X 90mm X 75mm

DETECTION PATTERN



APPLICATIONS • Garage / Corridor • Stairways / Basement • Covered Parking Area • ATM / Mall • Toilets / Main Entrance • Stores / Offices • And Many More

WALL MOUNT PIR MOTION SENSOR, MODEL: HC-7EN



MODEL : HC-7EN

SPECIFICATIONS

- Power Source : 220-240V AC / 50Hz
- Detection Angle : 180°
- Rated Load : Max.1200W (incandescent)
300W (fluorescent)
- Detection Distance : 5-12m adjustable (<24°C)
- Time Delay : 10sec±3sec to 7min±2min (adjustable)
- Ambient Light : <3-2000LUX (adjustable)
- Detection Motion Speed : 0.6-1.5m/s
- Installation Height : 1.8-2.5m
- Protection Class : IP 44
- Max. Size : 215mm X 90mm X 75mm

DETECTION PATTERN



APPLICATIONS • Covered Parking • Stairways / Garage • Entrance / Corridors • Office / Toilets • ATM / Lockers / Pantry • Basements / Store / Lifts
• And Many More

PIR MOTION SENSORS / ENERGY SAVING SENSORS / MICROWAVE SENSORS

OUTDOOR PIR MOTION SENSOR, WEATHER PROOF, MODEL : HC-15



MODEL : HC-15

SPECIFICATIONS

- Power Source : 220-240V AC / 50Hz
- Detection Angle : 180°
- Rated Load : Max.1200W (incandescent)
300W (fluorescent)
- Detection Distance : Max. 12m (<24°C)
- Time Delay : 10 sec±3 sec to 7min±2min(adjustable)
- Ambient Light : < 3-2000LUX(adjustable)
- Detection Speed : 0.6 -1.5m/s
- Installation Height : 1.8-2.5m
- Protection Class : IP 65
- Maximum Size : 125mm X 80mm X 55mm

DETECTION PATTERN



APPLICATIONS

- Outdoor Use as Well as Indoor • Parking Area / Terrace • Backyard / Garden Area
- Near Gate / Main Entrance • Malls / ATM • Balcony • And Many More

PIR MOTION SENSOR FOR LIGHTS (WITH HALOGEN LAMP) MODEL NO. HC-150W / HC-500W



MODEL NO.
HC-150W / HC-500W

SPECIFICATIONS

- Power Source : 220-240V AC / 50Hz
- Detection Angle : 180°
- Rated Load : Max. 1200W (220-240V/AC)
- Detection Distance : 5-12m adjustable (<24°C)
- Time Delay : 10sec±3sec to 7min±2min (adjustable)
- Ambient Light : < 3-2000LUX (adjustable)
- Detection Motion Speed : 0.6-1.5m/s
- Installation Height : 1.8m - 2.5m
- Protection Class : IP 44
- Maximum Size : 210mm X 140mm X 105mm (HC-150W)
260mm X 190mm X 185mm (HC-500W)

DETECTION PATTERN



APPLICATIONS

- Canopy • Stairways • Halls • Covered Parking Area • And Many More

CEILING MOUNT PIR MOTION SENSOR WITH LIGHT, MODEL : HC-25A

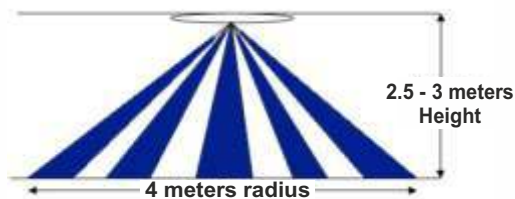


MODEL NO. HC-25A

SPECIFICATIONS

- Power Source : 220-240V AC / 50Hz
- Detection Angle : Max. 360° around
- Rated Load : Max. 2x25W incandescent bulb or
Max. 2x9W fluorescent lamps
- Detection Area : Max. 4 meters in radius
- Time-delay : From 10±5 seconds to
4±1 minutes adjustable
- LUX Control Level : From daytime to darkness adjustable
- Protection Class : IP 20
- Installation Height : 2.5m - 3m
- Max. Size : Ø 300mm X 100mm (depth)

DETECTION PATTERN



APPLICATIONS

- Rest Room • Corridor / Varanda • Lifts / Lift Lobby • ATM'S • Malls • Shopping Complex • Basement • And Many More

PIR MOTION SENSOR WITH LED LAMP, MODEL: HC-60



MODEL : HC-60

SPECIFICATIONS

- Power Source : 220-240V AC / 50Hz
- Detection Angle : 180°
- Rated Load : Max.25W(12PCS LED)/(10 PCS LED)
- Detection Range : Max.12m (<24°C)
- Time Delay : 10sec±3sec to 7min±2min(adjustable)
- Ambient Light : < 3-2000LUX(adjustable)
- Detection Motion Speed : 0.6-1.5m/s
- Protection Class : IP 44
- Installation Height : 1.8m - 2.5m
- Max. Size : 207mm X 207mm X 180mm

DETECTION PATTERN



APPLICATIONS

- Covered Parking Area • Back Yard / Corridor • Stairways / Basement • Garage / Malls • Stores / Lifts • Semi Covered Terrace
- And Many More

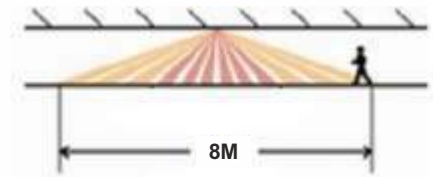
MICROWAVE MOTION SENSOR, MODEL : HC-27



SPECIFICATIONS

- Power Source : 220-240V AC / 50Hz
- Detection Angle : 360°
- HF System : 5.8GHz CW radar, ISM band
- Rated Load : Max.1200W (incandescent) 300W (fluorescent)
- Detection Distance : 1-8m (radius), adjustable
- Time Delay : 10 sec±3 sec to 12min±1min(adjustable)
- Ambient Light : <3-2000LUX(adjustable)
- Installation Height : 1.5-3.5m
- Power Consumption : Approx.0.9W
- Detection Speed : 0.6 -1.5m/s
- Max. Size : 95mm X 50mm X 45mm

DETECTION PATTERN



APPLICATIONS • Conference Room / Meeting Halls • Office / Stores • ATM / Malls • Locker Rooms / Basements • Corridors • And Many More

MICROWAVE SENSOR WITH DIMMER, MODEL: HC-28



SPECIFICATIONS

- Power Source : 220-240V AC / 50Hz
- Detection Angle : 360° (Ceiling Mount) / 180° (Wall Mount)
- HF System : 5.8GHz CW radar, ISM band
- Rated Load : Max.600W
- Detection Range : 10%, 50%, 75%, 100%, (Choice)
- Detection Distance : Wall : 5-15m (adjustable) / Ceiling : 1-8m (radius), adjustable
- Hold Time : 5sec, 30sec, 1min, 5min, 10min, 20min, 30min (Choice)
- Stand-by Period : 10sec, 1min, 5min, 10min, 20min, 30min, 1Hr+ ,0s (Choice)
- Stand-by-Dimming : 10%, 20%, 30%, 50% (Choice)
- Ambient Light : 2Lux, 10Lux, 50Lux, 2000Lux (Choice)
- Installation Height : 1.5 - 3.5m for wall / 2-8m for ceiling
- Max. Size : 92mm X 45mm X 26mm

PIR MOTION SENSORS FOR SECURITY ALARM PANELS

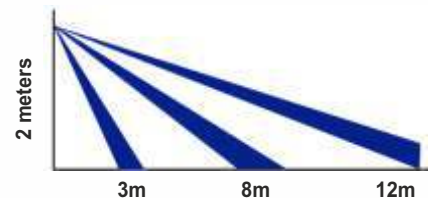
PIR MOTION SENSOR PET IMMUNE WALL MOUNT, MODEL : SR-605WP



SPECIFICATIONS

- Operating Voltage : 9-16 VDC
- Alarm Indicator : RED LED
- Current Consumption : <18mA
- Tamper Output : NC Contact DC28V, 100mA
- Alarm Output : NC/NO optional, contact DC28V 100mA
- Alarm Time : 0.3m/s - 3m/s
- Pet-Immunity : 12kgs
- Detection Angle : 110°
- Working Temperature : -10° C TO 50°C
- Dimension : 123mm X 62mm X 46mm

DETECTION PATTERN



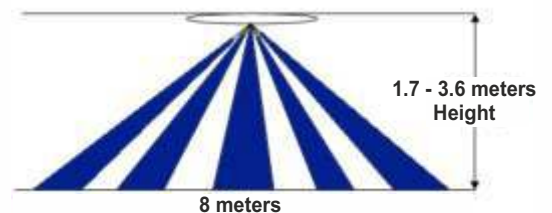
CEILING MOUNT PIR MOTION SENSOR, MODEL: SR-613W



SPECIFICATIONS

- Operating Voltage : 9-16 VDC
- Current Consumption : <18mA (12V DC)
- Operating Temperature : - 10 to +50 degree celcius
- Installation Height : 1.7~3.6m
- Detection Distance : Diameter 8 meters (at height 3.6m)
- Detection Angle : 360°
- Alarm Output : Relay output : N.O./N.C. Optional
- Alarm Indicator : Red LED
- Dimension : Ø106mm X 36mm

DETECTION PATTERN



APPLICATIONS • Security Alarm Panels / Systems • Home Automation Systems

PIR MOTION SENSOR WITH LED LAMP, MODEL: HC-460



MODEL : HC-460

SPECIFICATIONS

- Power Source : 220-240V AC / 50Hz
- Detection Angle : 360°
- Rated Load : 6W(30PCS LED, 450LM)
- Ambient Light : <20LUX
- Detection Distance : Max. 6m(<24°C)
- Time Delay : 120 sec
- Installation Height : 2 - 3.5m
- Max. Size : Ø 62mm X 120mm

- APPLICATIONS**
- Rooms • Entrance • Garage
 - Stairs • And Many More

LIGHT CONTROL DAY-NIGHT SENSOR PHOTOCCELL-WEATHER PROOF, MODEL: HC-308



MODEL : HC-308

SPECIFICATIONS

- Power Source : 220-240V AC / 50Hz
- Rated Current : 20A
- Ambient Light : <2-100LUX(adjustable)
- Material : PC (UV proof)
- Protection Class : IP 65
- Maximum Size : 95mm X 65mm X 35mm

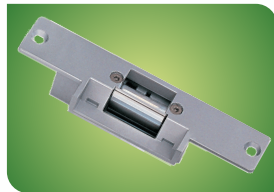
- ★ FOR HIGHER LOAD ABOVE 20A USE EXTERNAL CONTACTOR**
- APPLICATIONS**
- Automatic On/Off of Street Lights as per Day-Night Mode.
 - Any Indoor or Outdoor Lights

SENSORS CAN ALSO BE MADE AS PER CUSTOMER'S SPECIFIC REQUIREMENTS

OTHER PRODUCTS



PANIC SWITCH,IMPS-919



ELECTRIC DOOR STRIKE



ELECTRIC DROP BOLT



ELECTRO MAGNETIC LOCK



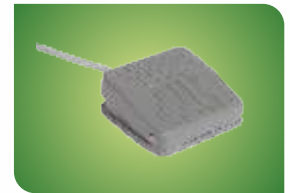
STAINLESS STEEL EXIT SWITCH



DSC WIRELESS ALARM PANEL



FLASHER SIREN, 12VDC/220VAC



FOOT PANIC SWITCH, IMPS-201



PHOTO BEAM SENSOR
2PH-60C



SINGLE BEAM SENSOR
PH-155A



MAGNETIC DOOR CONTACT
IMPS-910MW



VIBRATION SENSOR
IMPS-922



ACCESS KEYPAD
SY-110SA



SHUTTER CONTACT
IMPS-911MW



HOOTER/SIREN
CAP-123



SQUARE SIREN
SQR-117



GENERAL PURPOSE
REMOTE SWITCH



SMPS POWER SUPPLY



SMOKE SENSOR
2351E-312RL



LPG DETECTOR
12VDC/220VAC



GLASS BREAK SENSOR
ACCOUSTIC GBS-210



GLASS BREAK SENSOR
GBS-380C/GBS-380S



RESETTABLE
PANIC SWITCH



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