

Optex - MX 40-PT

Microwave Technology

Anti-crosstalk system



Because optex's unique microwave technology allows the design of antenna settings differently from conventional methods, the anti-crosstalk system of the MX40/50 prevents interference from other microwaves. When several detectors are placed in combination in one area, false alarms may occur due to matching frequencies, because microwaves from each detector may cause interference with each other. But the MX40/50 greatly reduces interference to prevent false alarms. And if noise does enter the antenna and causes microwave interference, the noise reduction circuit of the MX40/50 cancels out these to prevent unwanted alarms. The high quality, high reliable MX40/50 solves an undeniable problem for the combination sensors- the false alarms caused by interference from other microwaves.



Passive Infrared Technology

Quad zone logic

The highly accurate and reliable detection pattern will maintain its sensitivity through the entire detection area, even in high temperature or low contrast environments. Quad zone logic creates an extremely high vertical zone density, two or three times the size of conventional PIR'S. These taller zones capture the entire body mass and enable detection of even the smallest temperature contrast against the background. In addition, the vertical detection density has been improved to take into account dead zones created by furniture or partitions

Improved performance with reliability from microwave and passive infrared integration

1) High Reliability

The MX40/50 creates an integrated detection area. This enables the microwave detection area to synchronize to the pir detection area, achieving higher detection performance and preventing errors and false alarms.

With uniform distance between each lens segment and the pyroelectric elements, the spherical lens provides a precise focal length to each of the multiple lens segments. This enables each lens segment to precisely face its detection area and creates detection zones without distortion, achieving a new level in lens design precision. Spherical design also makes lens construction tough against outside forces and highly resistant to damage for disturbances to the lens.

The noise reduction circuit provides high reliability performance against outside noise, such as electromagnetic interference and especially noise from fluorescent lights. False alarms are thus greatly reduced.

2) Easy Installation

The MX40/50 allows two step adjustments. Setting the range selector to short or long range detection sensitivity according to the room size, makes adjustment during installation much easier and less time-consuming.

The PC board is removable for simple wiring, and just by using screwdriver, a firm tap will easily remove the knockout.

3) Compact, Stylish design

Compact and stylish body matches any interior design without disturbing the décor.



<u>Model</u>	<u>MX-40QZ/PT</u>	<u>MX-50QZ</u>
Detection method	Passive infrared and microwave	Passive infrared and microwave
Coverage	12m x 12m	15m x 15m
Detection zones	78 Zones (PIR)	78 Zones (PIR)
Mounting height	1.5 - 2.4m	2.2 – 3.0m
Sensitivity	2°c at 0.6m/sec	2°c at 0.6m/sec
Detectable speed	0.3 - 1.5 m/sec	0.3 – 1.5 m/sec
LED alarm indicator	Switch able (on/off)	Switch able (on/off)
Alarm period	Approx 2.5sec	Approx 2.5sec
Alarm output	N.C. 28V DC 0.2A max	N.C. 28V DC 0.2A max
Tamper switch	N.C, open when cover is removed	N.C, open when cover is removed
Pulse count	Approx 20sec 2 or 4	Approx 20sec 2 or 4
Warm up period	Approx 1 min	Approx 1 min
Power input	9.5 – 16V DC	9.5 – 16V DC
Current draw	18mA(max) at 12V DC	20mA(max) at 12 V DC
Weight	110g	110g
Operating temperature	-10°c - +55°c	10°c - +55°c
Environmental humidity	95% max	95%max
Microwave frequency	2.45GHz(FCC.IC,ETS300-440 approval)	2.45GHz(FCC.IC,ETS300-440 approval)
RF interference	No alarm 20V/M	No alarm 20V/M