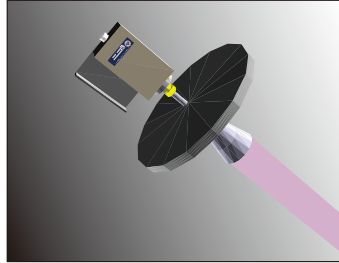


Unaffected by high temperatures, steam or water!

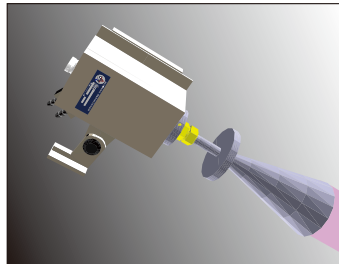
The MWS-MT-1 type Micro-Tracker has been developed for product tracking in the hot line process. The unit consists of a controller, antenna, and reflector. The MWS-MT-1 is an FM - CW method range finder. The MWS-MT-1 emits microwaves towards the reflector in order to measure the reflection from it.

When a slab interrupts the beam between the antenna and the reflector, the reflection will not be received resulting in the slab presence signal being output. The sensor can be installed either on a diagonal or horizontal axis. Because of the digital detection, this will not be affected by vapor, water running on the slab and/or water spray.

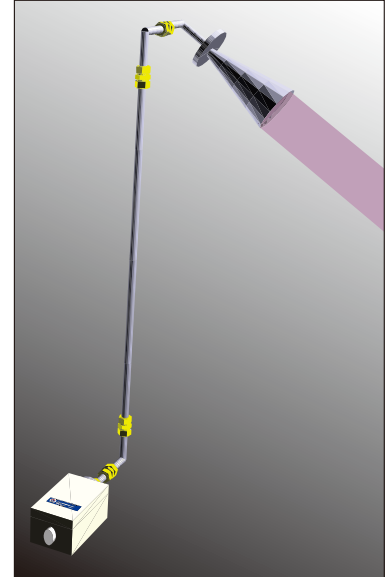
1.



2.



3.



Options : 1. Heat shield board
2. Water cooled bed
3. Waveguide
4. Ceramic antenna cover (For horizontal installation)

Features

■ Unaffected by adverse conditions

Microwaves are unaffected by heat, vapor, flames, or water running on the slab and water spray.

When countermeasures to heat are required, use the options above.

■ High reliability

The MWS-MT-1 detects the presence or absence of the slab by receiving or not receiving the reflection from the reflector. Because of digital detection, this will not be affected by vapor, water running on the slab or water spray.

■ High speed response time

50msec. update time.

■ No beam slippage

Beam adjustment is easy because the beam is conical-shaped and there will be no errors caused by slippage of the beam.

■ No set-to-set interference

This permits the use of multiple Micro-Trackers in close proximity to each other.

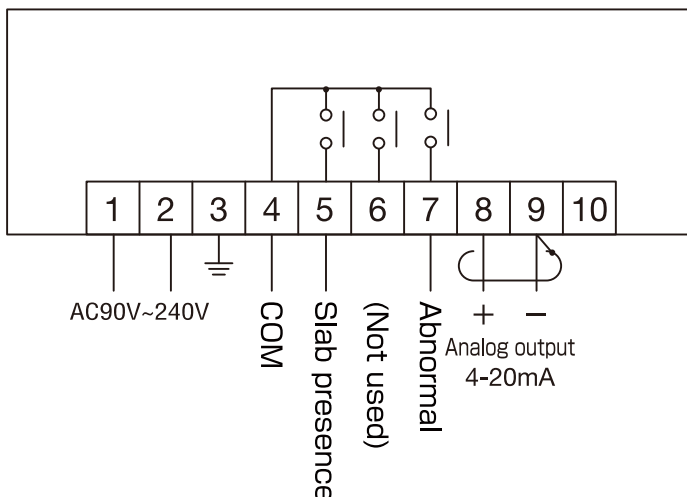
■ Enclosure rating IP65 equivalent

■ New reasonable price

Specifications

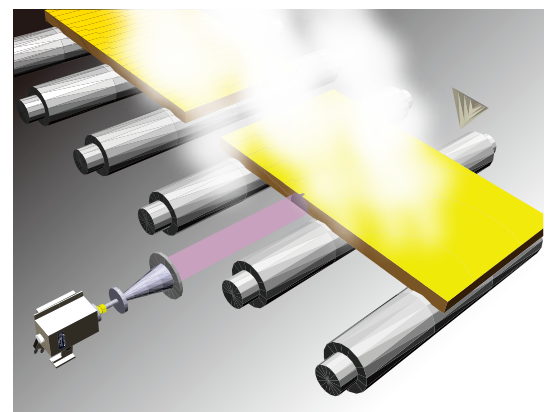
| | |
|--------------------------------------|---|
| Sensor type | MWS-MT-1 |
| Reflector type | CR-200T or roller or flat plate (customer-supplied) |
| Power supply | AC90V ~ 240V, 50/60Hz |
| Operating range | 1.5 ~ 6m (distance from antenna to reflector) |
| Frequency & transmission power | 24GHz approx. Less than 10mW |
| Slab presence output | 1a solid state relay: DC24V, 0.1A (standard) or 1a relay contacts: AC250V, 2A $\cos\phi=1$ (optional) |
| Abnormal output | 1a solid state relay: DC24V, 0.1A (standard) or 1a relay contacts: AC250V, 2A $\cos\phi=1$ (optional) |
| Analog output | 4 ~ 20mA (0~Received power level from the reflector) |
| Delay time from power on to function | Approx. 5sec. |
| Power consumption | 10VA |
| Noise immunity | Pulse noise from noise simulator $\pm 1.5KV$ (normal and common mode) |
| Ambient operating temperature | -10°C ~ +55°C |
| Enclosure rating | IP65/NEMA4 equivalent |
| Construction | Sensor: aluminum diecast (main body), SS400 (base and cover) Reflector: SS400 |
| Color | Grey |
| Weight | Sensor: Approx. 3.3kg (With large antenna approx. 4.7kg) Reflector: Approx. 1.0kg |

Wiring

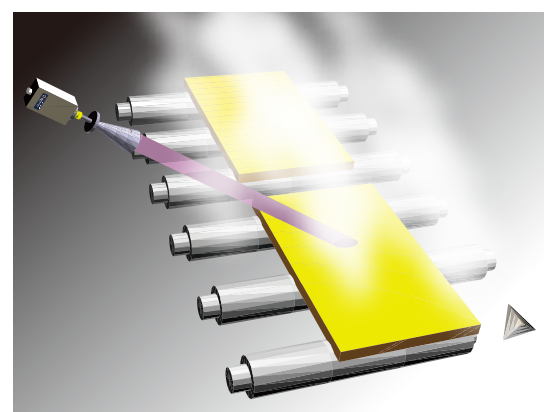


Relay configuration

| Purpose | | Slab presence | Abnormal |
|-----------------|---------------------|---------------|----------|
| Terminal number | | 4-5 | 4-7 |
| Unpowered state | | Open | Open |
| Powered State | Non-detecting state | Closed | Closed |
| | Detecting state | Open | Open |



Horizontal installation
For slabs of thickness >20mm



Diagonal installation
For slabs of any thickness

