

FORMULA SYSTEMS TECHNICAL DATA SHEET

SLIMSCREEN - FCU-0740



SUMMARY

This product features a multiplexed diagonal array of 40 infra-red (IR) beams, packaged in a 9mm wide x 27mm long aluminium housing.

Our interfaces combine with SlimScreen products in applications where direct connection is not appropriate. Housed in a coated steel casing, installation is quick and simple. The product enables the user to select multiple output relays and buzzer/nudging options.

Signal connections to the controller are provided by a pair of relays with changeover contacts. In order to ensure a failsafe response to power failure the detection relay, which is normally in the energised mode, will drop out when any of the detection systems are interrupted.

FEATURES

- Standard and Long-Range options
- Can be installed directly or with a Formula Systems Universal Interface
- Designed specifically for European and Asia Pacific markets
- No-fuss installation with flexible power connection options

PRODUCT OVERVIEW

| MODEL | VERSION | DIMENSIONS (MM) | | | RANGE (M) | | MOUNTING | | BEAMS | | SENSORS | | EN81-20 COMPLIANT |
|------------|-------------------|-----------------|----|------|-----------|-----|----------|-------|-------|------|---------|--------|-------------------|
| | | W | D | H | MIN | MAX | DOOR | TRACK | QTY | TOP | QTY TX | QTY RX | Y/N |
| SlimScreen | FCU-0740 Standard | 9 | 27 | 2010 | 0.7 | 3.0 | NO | YES | 40 | 1803 | 18 | 9 | N |

STANDARD CHARACTERISTICS

| PRODUCT STANDARD CHARACTERISTICS (UNLESS OTHERWISE NOTED) | |
|---|--|
| Response time: <100ms | Light immunity: > 100,000 lux |
| Output: NPN | Indicators (LED): Red obstruction |
| Ingress protection: IP54 | Temperature: Ambient -20°C to +70°C, Storage -40°C to +80°C |
| Operating voltage: 24V DC (18 - 30) | Material: Al, Alloy casing, plastic lens cover |
| Current Consumption: 100mA (Typical) | Approvals & Certification: UL, cUL, CE |



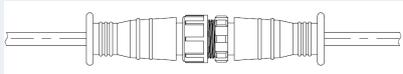
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TECHNICAL SPECIFICATIONS

| ITEM | DETAIL | COMMENTS |
|-------------------------------|---|---|
| Number of beams | 40 non-focused beams | Infra-red |
| Number of sensors | 18 | See drawing outline |
| Sensor spacing | 106mm (Main array) | See drawing outline |
| Scan Type | Interleaved | |
| Response Time | <100 milliseconds | Relates to point of detection in scan cycle |
| Range of detection | 1000-3000mm | Switth selected |
| Light immunity | 100,000 lux | Visible light |
| Angular displacement | 10° (inclusive) | |
| Positional mounting tolerance | +/- 10mm vertically +/- 4mm side by side | |
| Fail safe conditions | Faulty cable: Supply failure: | Fail safe to Open circuit faults Output switch to detect state |
| Operating voltage | 24 volts | 18 volts min / 30 volts max |
| Current consumption | <100 mA RMS | Total of both units |
| Control unit | Not required | Optional Universal Interface available |
| Environmental protection | IP54 | Conformal coated electronic components |
| Operating temperature range | -20°C to +70°C | |
| Storage temperature range | -40°C to +80°C | |
| Unit size | 9 x 26.5 x 2010mm | See product outline |
| Cable supplied | 2.7m | Initial 900mm attached directly to unit. Remainder of cable connected via screw-fit inline connector.  |
| Case material | Aluminium alloy | Anodised |
| Cover (filter) | Infra-red transparent plastic | |
| Installation | 1 x Instructions 14 x Screws M4.0 x 14mm 14 x Nuts M4.0 14 x Washers Lock M4.0 7 x Car Wall Clamps 1 x Hexagon Key | |
| System approvals | CE | EMC EN12015, EN12016 |



