FORMULA SYSTEMS
TECHNICAL DATA SHEET

SLIMSCREEN - FCU-0772LR

formula **SLIMSCREEN™**

SUMMARY

This product features a multiplexed diagonal array of 72 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

- EN 81-20 Compliant

- Standard and Long Range options available

- 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			EN81-20 COMPLIANT
		W	D	H	MIN	MAX	DOOR	TRACK	QTY	TOP	BOTTOM	Y/N
SlimScreen	FCU-0772 Long Range	9	27	1780	0	5.0	NO	YES	72	1603	22	Y

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	72 non-focused beams	Infra-red
Number of sensors	37	See drawing outline
Sensor spacing	45mm	See drawing outline
Scan type	Cross beam	
Response time	48 to 96 milliseconds	Relates to point of detection in scan cycle
Range of detection	0.8m - 5.0m	Standard range
Light immunity	100,000 lux	Visible light
Angular displacement	5° (inclusive)	
Positional mounting tolerance	+/- 10mm vertically +/- 4mm side by side	Doors closed, units touching
Fail safe conditions*	Faulty cable: Supply failure: Unit failure:	Fail safe to Open circuit faults Output switches to detect state Output switches to detect state
Operating voltage	24 volts	16 volts min / 30 volts max
Current consumption	<100 mA RMS	Total of both units
Control unit	Not required	Optional Universal Interface FPS 0274
Signal output	Open Collector NPN	
Environmental protection	IP54	Conformal coating to PCB's
Operating temperature range	-20 °C to +70 °C	Ambient environment
Storage temperature range	-40 °C to +80 °C	
Unit size	9x26.5x1780mm	
Mounting	Screw through channel	See drawing outline
Cable supplied	2 x 4.5m long	Initial 900mm attached directly to unit. Remainder of cable connected via screw-fit inline connector.
Case material	Aluminium alloy	Silver anodized
Cover (filter)	Infra-red transparant plastic	Snap-on fixing
Installation kit	1x Instructions 8x Screws M4 x14mm 8x Nuts M4 8x Washer spring M4 4x Car wall clamp	Socket head
Packaging	50mm x 1985mm 1.8kgs	
System approvals	CUlus, CE EN81-20	EMC EN12015 & EN12016

TRANSMITTER

RECEIVER

1603mm (TOP BEAM)

516mm

456.mm

389.mm

1780mm

~22.5mm

68.3mm

12mm

~45mm

22mm
(LOWEST BEAM)

10mm