FORMULA SYSTEMS
TECHNICAL DATA SHEET

SLIMSCREEN - FCU-0781

SUMMARY

This product features a multiplexed diagonal array of 81 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

-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-0781	9	27	2030	0.7	2.7	NO	YES	81	1803	36	16	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

FORMULA SYSTEMS
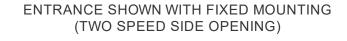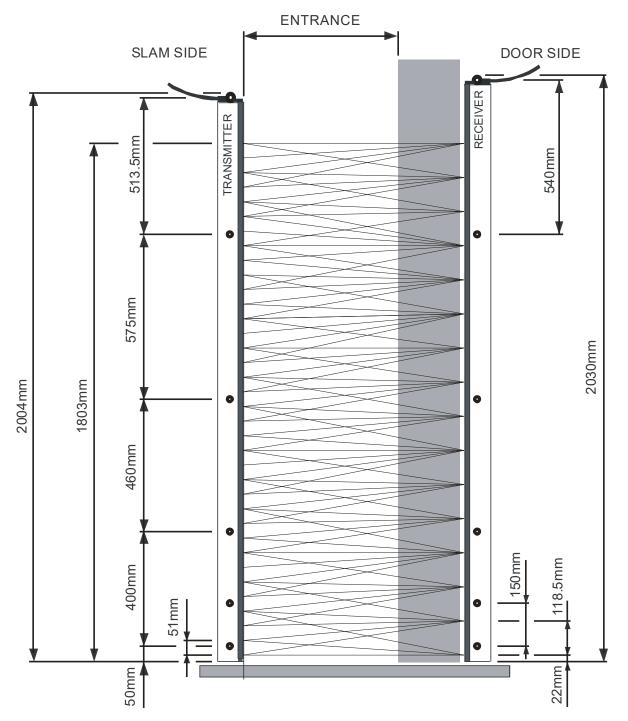# TECHNICAL DATA SHEET
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TECHNICAL SPECIFICATIONS

ITEM	DETAIL	COMMENTS
Number of beams	81 non-focused beams	Infra-red
Number of sensors	36	See drawing outline
Sensor spacing	46mm	See drawing outline
Scan Type	Interleaved	
Response Time	<100 milliseconds	Relates to point of detection in scan cycle
Range of detection	350-2750mm	Swith selected
Light immunity	50,000 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
Output	NPN transistor	Normally Closed, s/c protected
Control unit	Direct connection (AMD)	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 2030mm	See product outline
Cable supplied	2 x 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	Instructions Associated fasteners	
Packaging (approximate)	45mm diameter x 2070mm	
System approvals	CE	EMC EN12015, EN12016

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PRODUCT OUTLINE

ENTRANCE SHOWN WITH FIXED MOUNTING
(TWO SPEED SIDE OPENING)

ENTRANCE

SLAM SIDE

DOOR SIDE

TRANSMITTER

RECEIVER

2004mm
1803mm
513.5mm
575mm
460mm
400mm
51mm
50mm

540mm
2030mm
150mm
118.5mm
22mm

FORMULA SYSTEMS
TECHNICAL DATA SHEET
SLIMSCREEN - FCU-0781

PRODUCT OUTLINE

ENTRANCE SHOWN WITH FIXED MOUNTING
(CENTRE OPENING)

SLAM SIDE

ENTRANCE

DOOR SIDE

TRANSMITTER

RECEIVER

513.5mm
575mm
460mm
400mm
51mm
1803mm
2004mm
50mm

540mm
2030mm
150mm
118.5mm
22mm