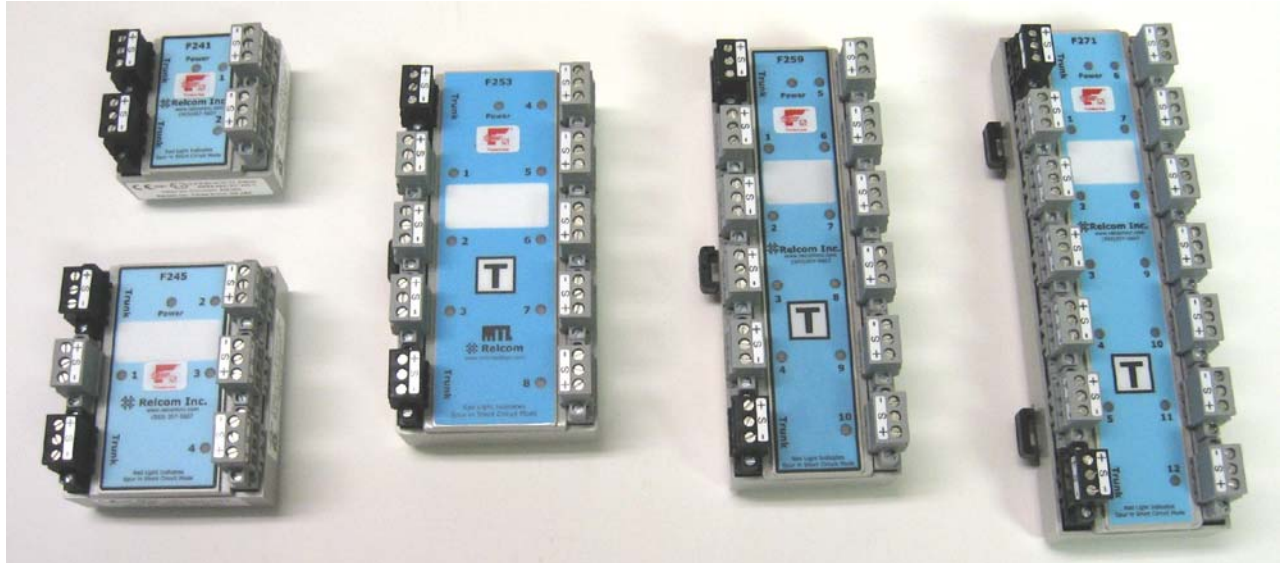


Product Specification

FOUNDATION™ Fieldbus
Profibus PA

IS Megablock Series



IS Megablocks provide for Fieldbus Device connections and include integrated short circuit protection (SpurGuards™). They have been designed and hazardous area certified for Intrinsically Safe Entity and FISCO applications. Refer to PS-001 “Megablock Series Product Overview” for the basic capabilities of the Megablock series. For FISCO Fieldbus Power Supplies, see MTL’s 912x-IS products. Contact MTL (www.mtl-fieldbus.com) for pricing and delivery.

Related Documents:

- PS-001: Megablock Product Overview
- 500-465: IS Megablock Installation Instructions
- 501-123: Relcom Fieldbus Wiring Guide

Accessories

- IS Megablock Terminator FCS-MBT
- Heavy Duty DIN rail end stop FCS-A06
- 35 mm DIN Rail, aluminum, 1 meter FCS-A01

Part Number

Specifications	
Mounting Requirements	35mm DIN Rail; IP54 (minimum) Enclosure
Wire Capacity	12-24 AWG, 2.5mm ² maximum
Case Material	Lexan Polycarbonate
Operating Temperature	-45°C to +70°C
Storage Temperature	-50°C to +70°C
Humidity	0 to 90% (non-condensing)
Screw Torque Range	0.5-0.6 Nm
Weight	130, 230, 390, 340, 400 grams (2, 4, 8, 10, 12 Port)
Minimum Input Voltage¹	10V
Maximum Input Voltage²	30V
Maximum Input Current²	1.5A
Unloaded Current Consumption	1.4, 1.7, 2.5, 2.9, 3.2 mA (2, 4, 8, 10, 12 Port)
Spur Device Current	29mA maximum (recommend only one device per spur)
Spur Short Circuit Current	40mA maximum
Trunk to Trunk Voltage Drop	0.1V maximum
Trunk to Spur Voltage Drop	0.3V maximum

Note 1: The minimum input voltage guarantees that the Spur output under full load will be at least 9.3V so that the device will see at least 9.0V.
 Note 2: The maximum input voltage and current may be further limited by the hazardous area certification — see the table on page 2.

Product specifications are subject to change without notice.

IS Megablock Selection:

Use the following table to determine which IS Megablock product is suitable for your application. The table includes only those IS Megablocks that are standard production. Other versions are available that require minimum purchases and longer lead-times. This includes Terminator variations (without, with, or switchable), connector variations (Pluggable Spring Clamp or Pluggable Insulation Displacement), and other SpurGuard™ current outputs (30mA, 50mA, or 60mA). Consult MTL about these other versions.

All Megablocks are useable in a non-hazardous area when installed per the installation instructions.

SpurGuard™	Device Ports	Terminator	FM	CSA	CENELEC	IEC Ex
F241	2	–	✓	✓	✓	✓
F245	4	–	✓	✓	✓	✓
F247	4	✓	✓	✓	✓	✓
F251	8	–	✓	✓	✓	✓
F253	8	✓	✓	✓	✓	✓
F259	10	✓	✓	✓	✓	✓
F261	10	Switchable	✓	✓	✓	✓
F271	12	✓	✓	✓	✓	✓

Note: Normally only one Megablock containing a built-in (fixed) Terminator exists on a single segment. Each segment must contain two Terminators and one is usually included in the Fieldbus Power Supply which is normally located in the control room.

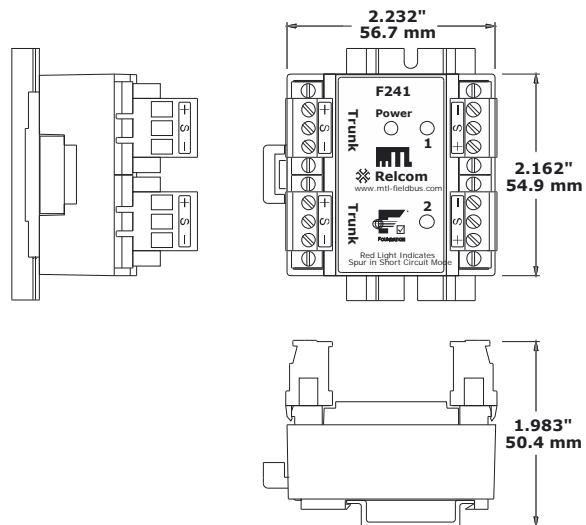
Approvals:



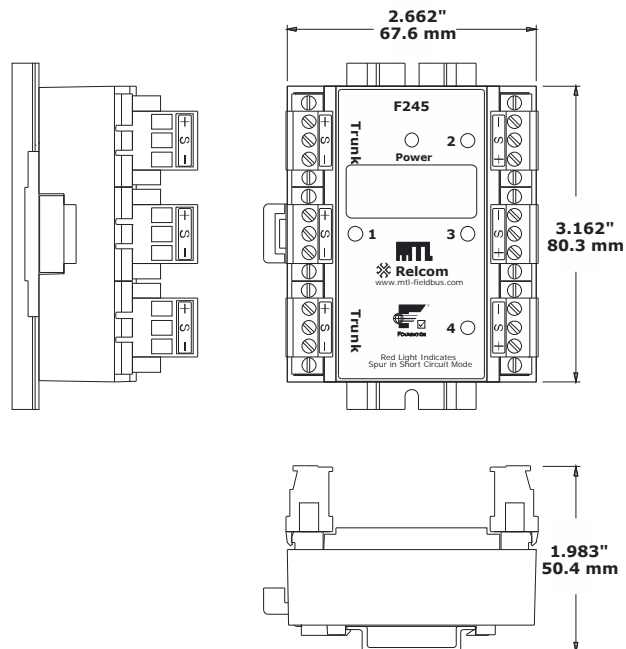
Region (Authority)	Standard	Certificate	Approved For	Ratings
Global (FF)	FF-846	DC067300	Foundation Fieldbus	See Specifications
EU (Relcom)	EN61326		Class A Industrial Locations	CE
Canada (CSA)	C22.2 No. 0—M1982 C22.2 No. 1010.1-92 C22.2 No. 1010.1B-97 T.I.L. No. 1-29 C22.2 No. 157-92 CAN/CSA-E79-0-95 CAN/CSA-E79-11-95	1422741	Class I, Div 1 Groups A-D Ex ia IIC T4 (Except 12 Port units)	Entity V _{max} =24V, I _{max} =240mA Pi=1.2W, Li=0mH, Ci=0uF FISCO V _{max} =17.5V, I _{max} =380mA Pi=5.32W, Li=0mH, Ci=0uF
USA (FM)	3600 3610 3810 (including supplement #1) IEC/TS 60079-27:2002	3020445	CI I, Div 1, ABCD T4 CI I, Zone 0, AEx ia IIC T4 (Except 12 Port units)	Same as Above
EU (KEMA)	EN 60079-0: 2009 EN 60079-11: 2007	KEMA 03ATEX1555X	Ex II 2 G Ex ia IIC T4	Entity: U _i =24V, I _i =240mA Pi=1.2W, Li=0mH, Ci=0uF FISCO: U _i =17.5V, I _i =380mA Pi=5.32W, Li=0mH, Ci=0uF
Global (IEC Ex)	IEC 60079-0: 2007-10 IEC 60079-11: 2006 IEC 60079-27: 2005-04	IECEX LCI 11.0068X	Ex ia IIC T4 Ga	Same as Above

Relcom SpurGuard™ technology is protected by multiple US patents: 6,366,437 6,369,997 6,519,125

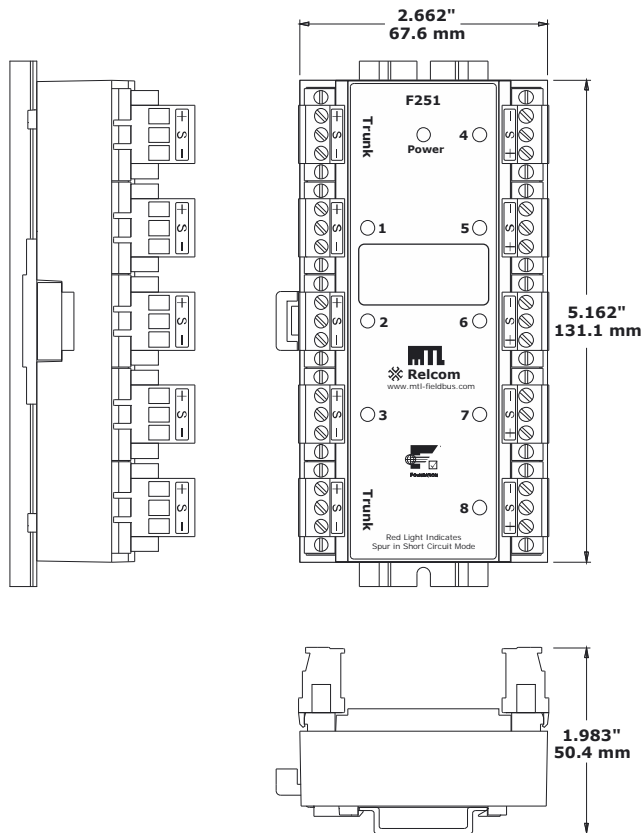
2 Port IS Megablock Dimensions



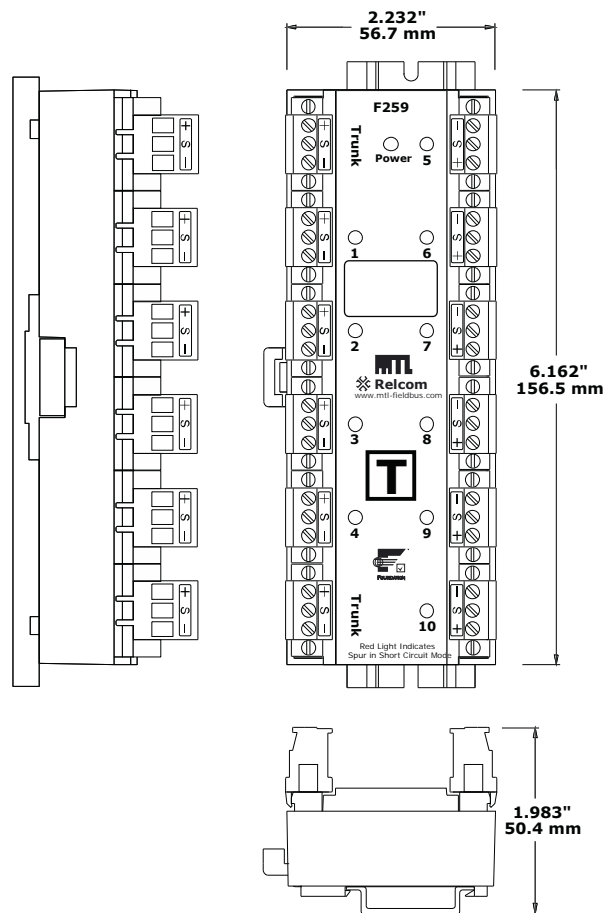
4 Port IS Megablock Dimensions



8 Port IS Megablock Dimensions



10 Port IS Megablock Dimensions



12 Port IS Megablock Dimensions

