

FB-FirePAC® Standard Termination Panel (STP) 8800-STP-08AI 8 Ch. Analog Input



Overview

FB-FirePAC is a Protected Premesis Control Unit and Combination System that is NRTL tested and approved to meet ANSI / UL-864 10th Edition and various other UL & NFPA codes as required by this standard.

The FireBus 8 Channel Analog Input Standard Termination Panel (8800-STP-08AI) is designed to support Analog Initiating Device Circuits (AIDC). AIDC's in FB-FirePAC systems are "3-wire" analog field devices like flame detectors, gas detectors or other 24 VDC analog transmitters with a nominal 4 - 20 ma signal.

This Standard Termination Panel (STP) is completely passive having only terminals, a sealed two-position latching power switch and replaceable fuse. There are no active electronics to interfere with the analog input module of the Programmable Automation Controller (PAC).

STP Field Side Connections

Each of the eight channels has four field terminals a latching field device power switch and a fuse.

- Two lower deck terminals for 24 VDC power to field device
- Two upper deck terminals for analog signal and shield
- Field terminals support 24 AWG to 12 AWG wire
- Each channel has a 24 VDC field device power switch
- 2 Amp replaceable mini blade type fuse per channel

STP System Side Connections

The system side connections are factory wired into the PAC analog input module and power distribution subsystem. There are eight "fixed" terminals for the singleended analog signals and a "pluggable" 24 VDC power connector.

Hardware Compatibility

The 8800-STP-08AI 8 Channel Analog STP is compatible with FB-FirePAC systems using the 1756 ControlLogix[®] platform from Rockwell Automation. Two 8 channel STP's are paired with a 1756-IF16 or 1756-IF16H 16 channel analog input module. ("H" varient has HART support)

Operation

The FB-FirePAC system supports Analog Initiating Device Circuits (AIDC's) for use in the fire & gas system and utilizes the ControlLogix 1756-IF16 and 1756-IF16H analog input modules to support these circuits. These modules are configured for "single-ended" operation which provides the maximum channel density of 16 analog inputs.

Two eight channel 8800-STP-08AI termination panels are required to support these sixteen signals.

The FB-FirePAC is designed to support "3-Wire" transmitters for AIDC's.

Two wires provide +24 VDC and 24 VDC Common to power the field device, the third wire is the "single-ended" signal from the field device that is a nominal 0 - 20milliamp (ma).

The architecture of the STP is split in two, a system-side and a field-side. The terminals on the system-side are factory wired to the PAC analog input module or power distribution sub-system and are sized appropriately for internal cabinet wiring.

The terminals on the field-side are for landing three wire shielded cables from the analog field devices and are sized for up to 12 AWG field wiring.

Between the system and field sides each channel has a dedicated power switch and 2A fuse in line with the +24 VDC allowing the user to easily power down individual AIDC's for commissioning, maintenance and / or resetting latching field devices.

The 24 VDC power for each AIDC uses the lower two terminals and are marked with plus (+) and minus (-) polarity indicators.

The field devices' analog signal uses the upper two terminals for the channel. One terminal is marked with an "S" for the AIDC's cable shield wire which is routed to earth ground. The second terminal is for the analog signal and is marked with a signal number from 1 to 16.

8 Channel Analog Term. Panel	Operating voltage:	EMI/RFI compatibility:	Approvals:
Part No 8800-STP-08AI	18–30 VDC	Not Applicable.	Control Units and Accessories
		No active electronic	For Fire Alarm Systems
FB-FirePAC on the	Communication protocols:	components	[UII 864·2014 Ed 10]
1756 Controll agiv Distance	None	components.	
1756 ControlLogix Platform	None		
		Temperature range:	Location rating:
Designed for use with the	Current (24 vdc):	Max. continuous operating	Class I, Div. 2, Groups B,C,D
ControlLogix	Up to 2A per channel	158°F (70°C)	(Pending)
1756-IF16, 1756-IF16H		Min. continuous operating	
Analog Input Modules		-4°F (-20° C)	4.094 in (104 mm) Wide
, analog input hodales		(no condensation/icing)	3 634 in (92 3 mm) High
Software Compatibility		(no condensation/lengy	2.604 in (69.4 mm) (Doon)
Soltware compatibility.		Champer 4005 ha + 17005	2.094 III (00.4 IIIIII) (Deep)
Studio 5000 Logix Designer		Storage -40°F to $\pm 1/6°F$	
Rev. 32 and up.		(–40°C to +80°C)	Weight:
			9.6 oz (272g)
Device Configuration:		Humidity:	
Studio 5000 Loaix Desianer		5 to 95% relative humidity	Materials:
FireBus FB-Firel ogix® Add		(no condensation)	ROHS compliant
On Instructions (AOI) for			
AIDC field dovisos			
AIDC HEIU DEVICES.			







Ordering information:

8800-STP-08AI Standard Term. Panel, 8 Ch. Analog Input

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Note:

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