

System 9000 backplane

7916



- Provides safe, easy wiring between the backplane and non I.S. automation systems using standard prefabricated I/O cables
- Direct, Redundant and Duplicate signalling - including HART I/O
- Robust, compact high-end design solution for 16 system 9000 units
- Digital output and LEDs indicate backplane system status



Application

- The 7916 backplane is a compact and robust solution that enables a safe and easy connection of PR system 9000 IS device signals into standard automation systems.
- Standard automation system cables and connectors are used to link the backplane to the I/O cards.
- The backplane can be used for Direct, Redundant, Duplicate signalling including HART I/O System connectivity (HART MUX).
- The system 9000 devices isolate and convert AI, AO, DI and DO signals coming from, or going to the I.S. classified area, and routes those signals to a system automation I/O card.
- The system 9000 units maintain a SIL2 level of functional safety, even when mounted in the backplane solution.

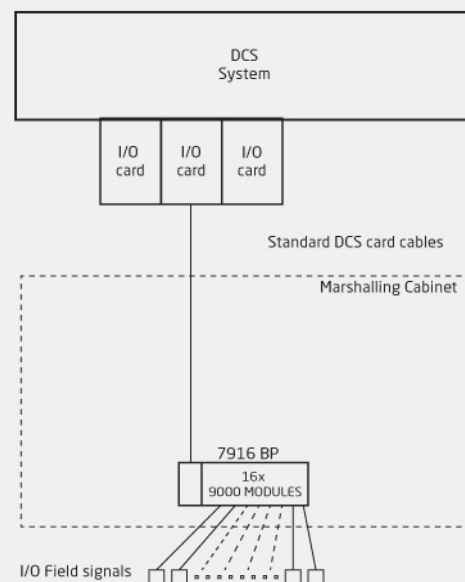
Technical characteristics

- Robust, compact high-end design that holds 16 system 9000 units.
- Digital output indicates status of the 9000 devices and primary/back-up power supplies.
- Flexible 24 VDC supply voltage and redundant power supply connection solution.

Mounting / installation / programming

- Flexible horizontal/vertical panel or wall mounting in the Safe or Zone 2 / Div 2 areas.
- System 9000 devices easily snap ON and OFF using piano keys, and devices can be hot-swapped.
- Tag number and ID labels are easily mounted and read by using the dedicated piano key spacer.
- Wide temperature operation range: -20...+60°C.
- Backplane selection guide can be found at www.prelectronics.com/backplane

Connections



Order:

7916	16 module backplane
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Environmental Conditions

Specifications range.....	-20°C to +60°C
Storage temperature.....	-40°C to +85°C
Relative humidity.....	< 95% RH (non-cond.)
Installation in.....	Pollution degree 2 & measurement / overvoltage cat. II

Mechanical specifications

Dimensions (HxWxD).....	144 x 443 x 141 mm
Wire size.....	2.5 mm ² / AWG 12
Wire size.....	(Supply 1 / 2 and status relay connectors)

Common specifications

Supply

Supply voltage.....	20...31.2 VDC (24 DC nom.)
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Isolation voltage

Isolation voltage, test / working.....	500 VAC / 50 VAC
Isolation voltage, test / working.....	(Basic isolation between supply 1 & 2 and status relay)

Max. required power.....	≤ 60 W
Replaceable fuses.....	Fuse F1 & F2: 3.15 A SB, 250 V, type TR5

Output specifications

Status relay

Max. voltage.....	32 V (Zone 2 / Div. 2 area)
Max. voltage.....	42 V (Safe area)
Max. current.....	100 mA (Zone 2 / Div. 2 area)
Max. current.....	100 mA (Safe area)

Observed authority requirements

EMC.....	2014/30/EU
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Approvals

UL.....	UL 508
EAC.....	TR-CU 020/2011
ATEX 2014/34/EU.....	DEKRA 13ATEX0136X
IECEX.....	DEK 13.0044X
FM.....	0003049918-C