



7908/7916

System 9000 Backplane

**Universal wiring manual
and I/O card reference list**

No. 7900UWM102_UK

- DK** ▶ PR electronics A/S tilbyder et bredt program af analoge og digitale signalbehandlingsmoduler til industriel automation. Programmet består af Isolatorer, Displays, Ex-barrierer, Temperaturtransmittere, Multifunktionelle transmittere mfl. Vi har modulerne, du kan stole på i selv barske miljøer med elektrisk støj, vibrationer og temperaturudsving, og alle produkter opfylder de strengeste internationale standarder. Vores motto »Signals the Best« er indbegrebet af denne filosofi - og din garanti for kvalitet.
- UK** ▶ PR electronics A/S offers a wide range of analog and digital signal conditioning devices for industrial automation. The product range includes Isolators, Displays, I.S. Interfaces, Temperature Transmitters, and Multifunctional Devices. You can trust our products in the most extreme environments with electrical noise, vibrations and temperature fluctuations, and all products comply with the most exacting international standards. »Signals the Best« is the epitome of our philosophy - and your guarantee for quality.
- FR** ▶ PR electronics A/S offre une large gamme de produits pour le traitement des signaux analogiques et numériques dans tous les domaines industriels. La gamme de produits s'étend des transmetteurs de température aux afficheurs, des isolateurs aux interfaces SI, jusqu'aux modules multifonctions. Vous pouvez compter sur nos produits même dans les conditions d'utilisation sévères, p.ex. bruit électrique, vibrations et fluctuations de température. Tous nos produits sont conformes aux normes internationales les plus strictes. Notre devise »SIGNALS the BEST« c'est notre ligne de conduite - et pour vous l'assurance de la meilleure qualité.
- DE** ▶ PR electronics A/S verfügt über ein breites Produktprogramm an analogen und digitalen Signalverarbeitungsgeräte für die industrielle Automatisierung. Dieses Programm umfasst Displays, Temperaturtransmitter, Ex- und galvanische Signaltrenner, und Multifunktionelle Geräte. Sie können unsere Geräte auch unter extremen Einsatzbedingungen wie elektrisches Rauschen, Erschütterungen und Temperaturschwingungen vertrauen, und alle Produkte von PR electronics werden in Übereinstimmung mit den strengsten internationalen Normen produziert. »Signals the Best« ist Ihre Garantie für Qualität!

1743

SYSTEM 9000 BACKPLANE UNIVERSAL WIRING MANUAL AND I/O CARD REFERENCE LIST CONTENTS

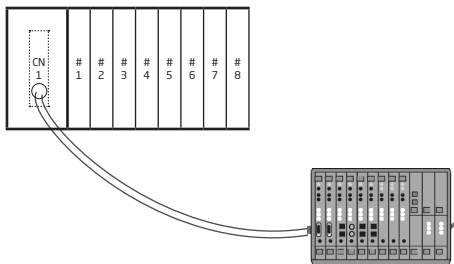
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ORDER CODE

I/O type	PR system 9000 device	# Slot	PR ordering references
8/16 x I/O	8 x 9___xxxx	1...8	7908-UNI-A1B 7908-UNI-H1B (HART connector)
16/32 x I/O	16 x 9___xxxx	1...16	7916-UNI-A1B 7916-UNI-H1A (HART connector)

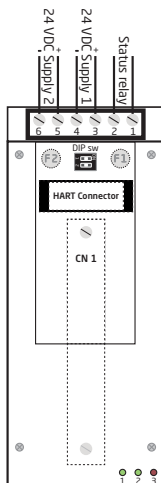
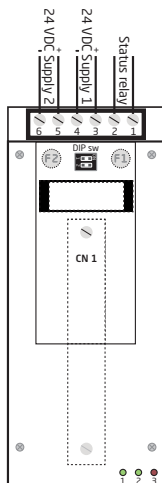
!! Do not mix I.S. and non-I.S. devices on the same backplane

SUPPLY AND STATUS RELAY CONNECTIONS - 7908

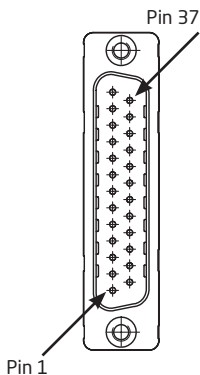


**BACKPLANE
SINGLE CONNECTOR
7908-UNI-A1B**

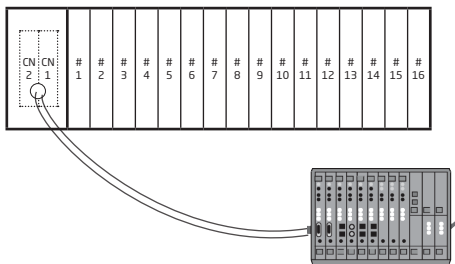
**BACKPLANE
SINGLE CONNECTOR
7908-UNI-H1B**



**CN 1
SUB D
37 POLE**

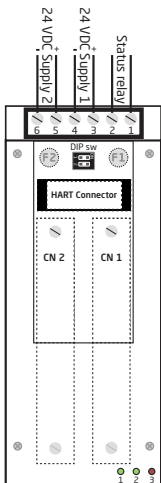
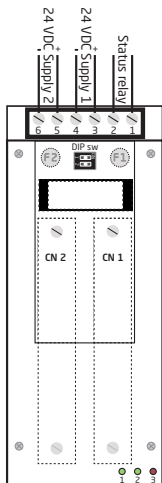


SUPPLY AND STATUS RELAY CONNECTIONS - 7916

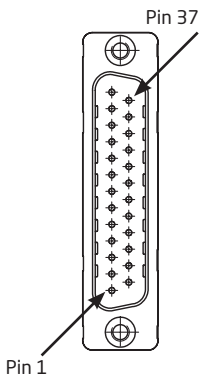


**BACKPLANE
DUAL CONNECTORS
7916-UNI-A1B**

**BACKPLANE
DUAL CONNECTORS
7916-UNI-H1A**



**CN 1 & 2
SUB D
37 POLE**



Block diagram for universal backplane 8 modules - 8/16 x I/O

The wiring shown in the table on the following page is 1:1 wiring with no components mounted in the signal chain.

Supported I/O modules:

9106xxx, 9107xx, 9113xx, 9116xx, 9202xxx and 9203xxxx.

Please note:

Check the module manual for correct Input/Output signal wiring.

**Universal card wiring, 16 x uni. I/O,
2 channel modules**

9__ _xxxx Field equipment terminals		Non I.S. I/O terminal	SUB-D37 adaptor CN1
Unit	Ch.		
#1	1	Pin 11	Pin 20
		Pin 12	Pin 1
	2	Pin 13	Pin 21
		Pin 14	Pin 2
#2	1	Pin 11	Pin 22
		Pin 12	Pin 3
	2	Pin 13	Pin 23
		Pin 14	Pin 4
#3	1	Pin 11	Pin 24
		Pin 12	Pin 5
	2	Pin 13	Pin 25
		Pin 14	Pin 6
#4	1	Pin 11	Pin 26
		Pin 12	Pin 7
	2	Pin 13	Pin 27
		Pin 14	Pin 8
#5	1	Pin 11	Pin 28
		Pin 12	Pin 9
	2	Pin 13	Pin 29
		Pin 14	Pin 10
#6	1	Pin 11	Pin 30
		Pin 12	Pin 11
	2	Pin 13	Pin 31
		Pin 14	Pin 12
#7	1	Pin 11	Pin 32
		Pin 12	Pin 13
	2	Pin 13	Pin 33
		Pin 14	Pin 14
#8	1	Pin 11	Pin 34
		Pin 12	Pin 15
	2	Pin 13	Pin 35
		Pin 14	Pin 16

Block diagram for universal backplane 16 modules - 16/32 x I/O

The wiring shown in the tables on the following pages is 1:1 wiring with no components mounted in the signal chain.

Supported I/O modules:

9106xxx, 9107xx, 9113xx, 9116xx, 9202xxx and 9203xxxx.

Please note:

Check the module manual for correct Input/Output signal wiring.

**Universal card wiring, 32 x uni. I/O,
2 channel modules**

9__ _xxxx Field equipment terminals		Non I.S. I/O terminal	SUB-D37 adaptor CN1
Unit	Ch.		
#1	1	Pin 11	Pin 20
		Pin 12	Pin 1
	2	Pin 13	Pin 21
		Pin 14	Pin 2
#2	1	Pin 11	Pin 22
		Pin 12	Pin 3
	2	Pin 13	Pin 23
		Pin 14	Pin 4
#3	1	Pin 11	Pin 24
		Pin 12	Pin 5
	2	Pin 13	Pin 25
		Pin 14	Pin 6
#4	1	Pin 11	Pin 26
		Pin 12	Pin 7
	2	Pin 13	Pin 27
		Pin 14	Pin 8
#5	1	Pin 11	Pin 28
		Pin 12	Pin 9
	2	Pin 13	Pin 29
		Pin 14	Pin 10
#6	1	Pin 11	Pin 30
		Pin 12	Pin 11
	2	Pin 13	Pin 31
		Pin 14	Pin 12
#7	1	Pin 11	Pin 32
		Pin 12	Pin 13
	2	Pin 13	Pin 33
		Pin 14	Pin 14
#8	1	Pin 11	Pin 34
		Pin 12	Pin 15
	2	Pin 13	Pin 35
		Pin 14	Pin 16

9_ _ _ xxxx Field equipment terminals		Non I.S. I/O terminal	SUB-D37 adaptor CN2
Unit	Ch.		
#9	1	Pin 11	Pin 20
		Pin 12	Pin 1
	2	Pin 13	Pin 21
		Pin 14	Pin 2
#10	1	Pin 11	Pin 22
		Pin 12	Pin 3
	2	Pin 13	Pin 23
		Pin 14	Pin 4
#11	1	Pin 11	Pin 24
		Pin 12	Pin 5
	2	Pin 13	Pin 25
		Pin 14	Pin 6
#12	1	Pin 11	Pin 26
		Pin 12	Pin 7
	2	Pin 13	Pin 27
		Pin 14	Pin 8
#13	1	Pin 11	Pin 28
		Pin 12	Pin 9
	2	Pin 13	Pin 29
		Pin 14	Pin 10
#14	1	Pin 11	Pin 30
		Pin 12	Pin 11
	2	Pin 13	Pin 31
		Pin 14	Pin 12
#15	1	Pin 11	Pin 32
		Pin 12	Pin 13
	2	Pin 13	Pin 33
		Pin 14	Pin 14
#16	1	Pin 11	Pin 34
		Pin 12	Pin 15
	2	Pin 13	Pin 35
		Pin 14	Pin 16

Not used terminals on SUB-D37: 17, 18, 19, 36, 37

APPENDIX

**BACKPLANE TO I/O CARD
CABLE REFERENCES**

&

**9106, 9107, 9113, 9116, 9202, 9203
WIRING CONNECTION**

SUGGESTED SYSTEM ABLE FOR UNIVERSAL BACKPLANES

Description

- Shielded round cable, assembled with one 37 pole connector on one side and sleeves on the other side.
- D-SUB 37 female connector.
- 1:1 connection.
- Cable length: Variable.

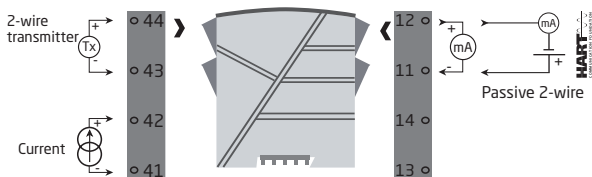


Please contact us for further information.

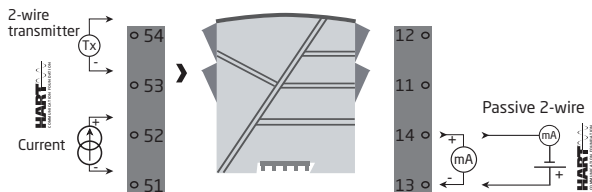
9106 HART TRANSPARENT REPEATER



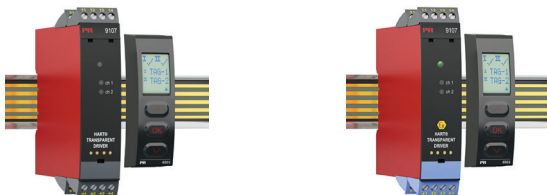
Channel 1



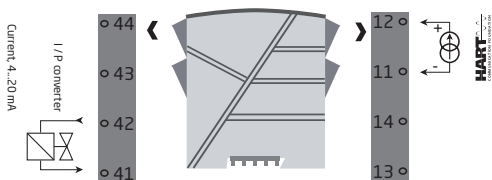
Channel 2



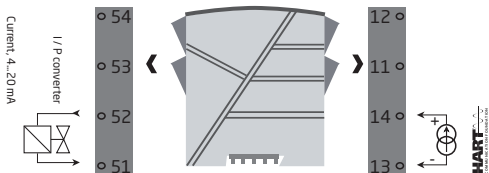
9107 HART TRANSPARENT DRIVER



Channel 1



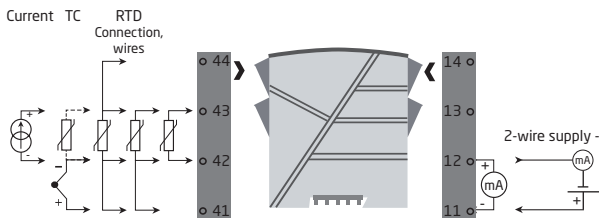
Channel 2



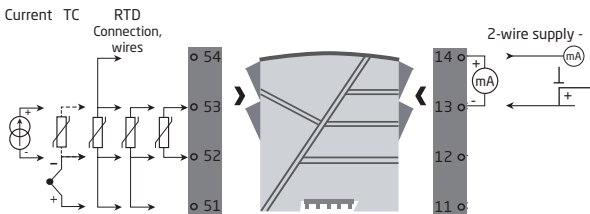
9113 TEMPERATURE / mA CONVERTER



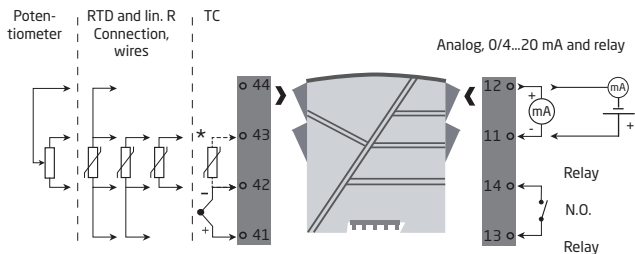
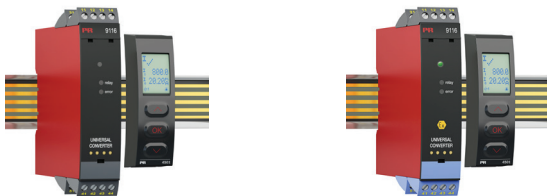
Channel 1:



Channel 2:



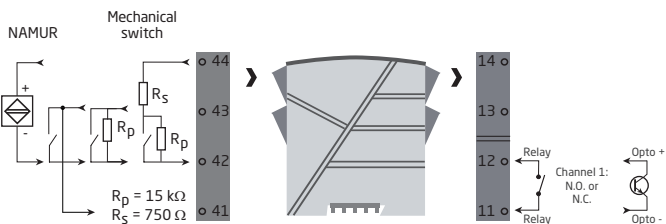
9116 UNIVERSAL CONVERTER



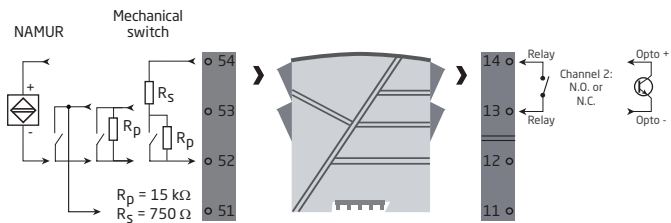
9202 PULSE ISOLATOR



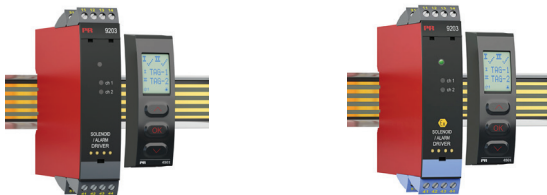
Channel 1:



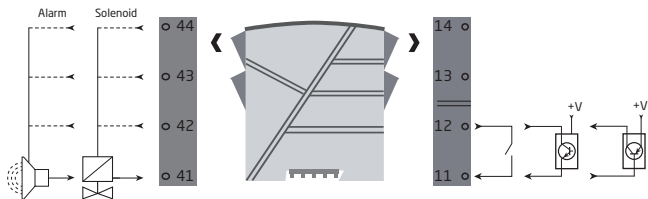
Channel 2:



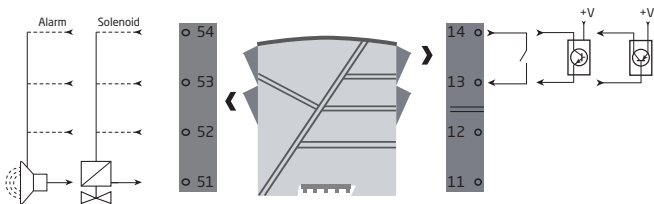
9203 SOLENOID / ALARM DRIVER



Channel 1



Channel 2





Displays Programmable displays with a wide selection of inputs and outputs for display of temperature, volume and weight, etc. Feature linearization, scaling, and difference measurement functions for programming via PReset software.



I.S. interfaces Interfaces for analog and digital signals as well as HART signals between sensors / I/P converters /frequency signals and control systems in Ex zone 0, 1 & 2 and for some devices in zone 20, 21 & 22.



Isolation Galvanic isolators for analog and digital signals as well as HART signals. A wide product range with both loop-powered and universal isolators featuring linearization, inversion, and scaling of output signals.






























Temperature A wide selection of transmitters for DIN form B mounting and DIN rail devices with analog and digital bus communication ranging from application-specific to universal transmitters.



Multifunctional PC or front programmable devices with universal options for input, output and supply. This range offers a number of advanced features such as process calibration, linearization and auto-diagnosis.



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 DS/EN ISO 14001

