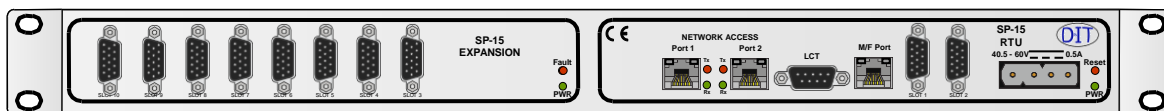


Plug-In Modules (PIMs) for RTU Products



- 8 x Digital Alarm Input Monitoring
- 4 x Relay Output Controls
- 2 x Analogue channel monitoring
- 1 x Cable Theft Double Slot PIM
- 2 x 4-20 mA channels
Temperature & RH Monitoring
Fuel Tank applications etc
- 2 x Serial Interface PIM
- RTU Network Access via Ethernet, Serial or Modem Ports
- Local or Remotely Manageable
- Managed by D&ITs NMS PC-Gx

Data and Information Technology's range of Remote Terminal Units (RTUs) provide network monitoring and control capabilities quickly and efficiently without the need for custom programming.

An example RTU is the SP-15 as shown above which support up to 10 x Plug-In Modules (PIMs)

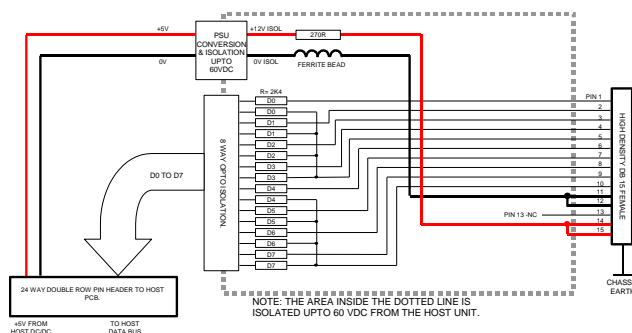
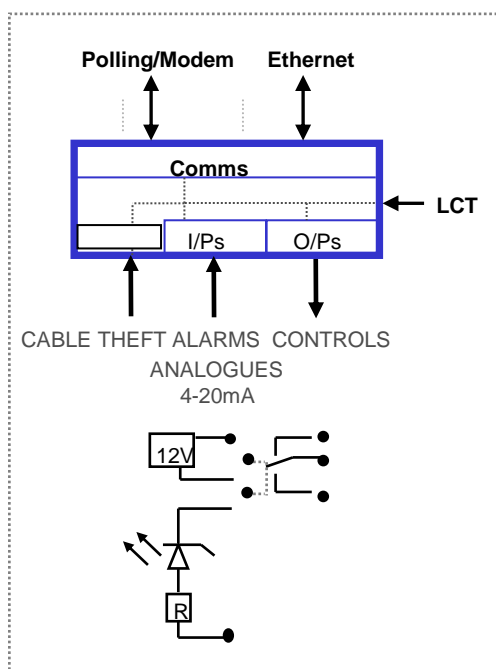
Please refer to separate datasheet for details of these individual RTUs summarised below:

- SP-15 RTU (serial networking)
- SP-25 RTU (dial up networking)
- SP-35 RTU (modem & Ethernet networking)
- SP-85 (MNDC Poller) - Ethernet networking

Plug-In Module Product Overview

Non-Polarity-Sensitive Input PIM (9050-0470A)

Connector	15-way high-density 'D' connector
Number of Inputs	8 in two groups of 4 (may be voltage or volt-free contact) – Optically Isolated
Input Rating	May be voltage or volt-free contact – for voltage contacts, the operating range is 4.5V DC – 60V DC
Interlocking Isolation	Pin 13 blocked Isolated up to 60V DC from host PCB
Input Bias	12V isolated supply, presented on 2 pins
Power Consptn	0.65Watts (all inputs on, typical)

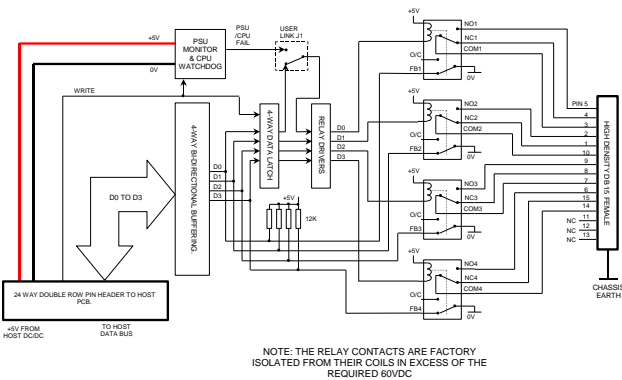


Plug-In Module Product Overview Continued

Relay Output PIM, Fail-Safe (9050-0509A_C)

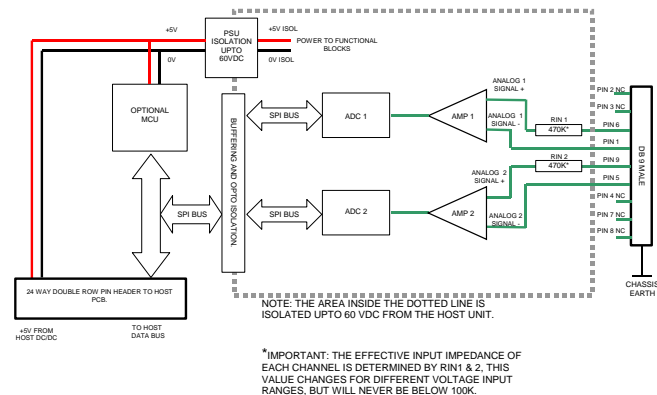
The module is compatible with the mechanical features of the existing standard relay module.

Connector	15-way high-density 'D' connector (female)
Interlocking	Pin 12 blocked
Number of Outputs	4 off, change-over contacts
Contact Rating	30VA (1A @ 30V DC, 0.5A @ 120 V AC non-reactive load)
Maximum switched voltage	60V DC, 42.4V AC
Isolation	Isolated up to 60V DC from host PCB
Power Conspn	1.0W (all relays energised, typical)



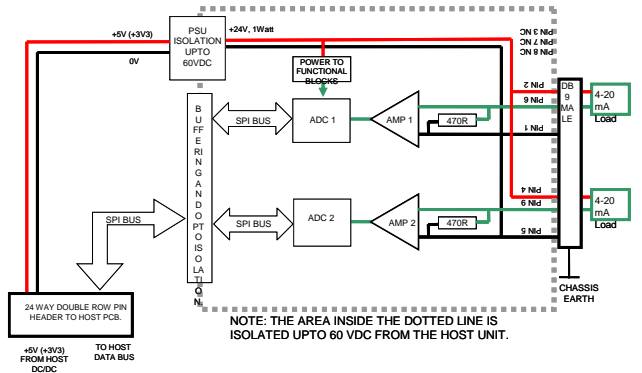
2 Analogue Inputs Module (9050-0247C)

Connector	9-way 'D' connector (male)
Interlocking	none
Number of Chans	2
Resolution	12-bit
Accuracy	10-bit over full scale, and full temperature range
Range	0-10V standard (0-60V option also available)
Isolation	Isolated up to 60V DC from host PCB



2 Channel 4-20 mA Module (9050-0541A)

Typical Appns	Temperature & RH Monitoring, Fuel level
Connector	9-way 'D' connector (male)
Interlocking	None
Number of Chans	2
Resolution	12-bit
Accuracy	See Data Sheet of Sensor utilised (But nominally better than 3% for device referenced)
Range	4-20mA standard
Alarm Outputs	4 digital alarm outputs per channel (High, Pre High, Low & Pre Low – individual threshold values set to customers requirements)
Power consmptn	0.1W (typical)



Dual Serial Ports Module (0529A) 2nd Generation

Connector	15-way HD 'D' connector (Female)
Interlocking	None
Number of Chans	2
Interfaces	RS232, RS422, RS485 support

Dual Cable Theft Modules (9050-0537 & 0539)

The two PIMs of the special-purpose pair supporting 4 routes have identical pin presentations: The product has been upgraded with protected, isolated line feed to enhance resilience

Connector	9-way 'D' (female)
Interlocking	None
Monitoring Capty	2 cables on left connector, designated Cables 5 ... 6 (2 pins/cable) 2 cables on right connector, designated Cables 1 ... 2 (2 pins/cable)
Line Voltage	48V nominal
Current Trip	11mA
Isolation	Cable pairs are isolated from each other and isolated from Ground to provide added resilience under cable theft attacks