

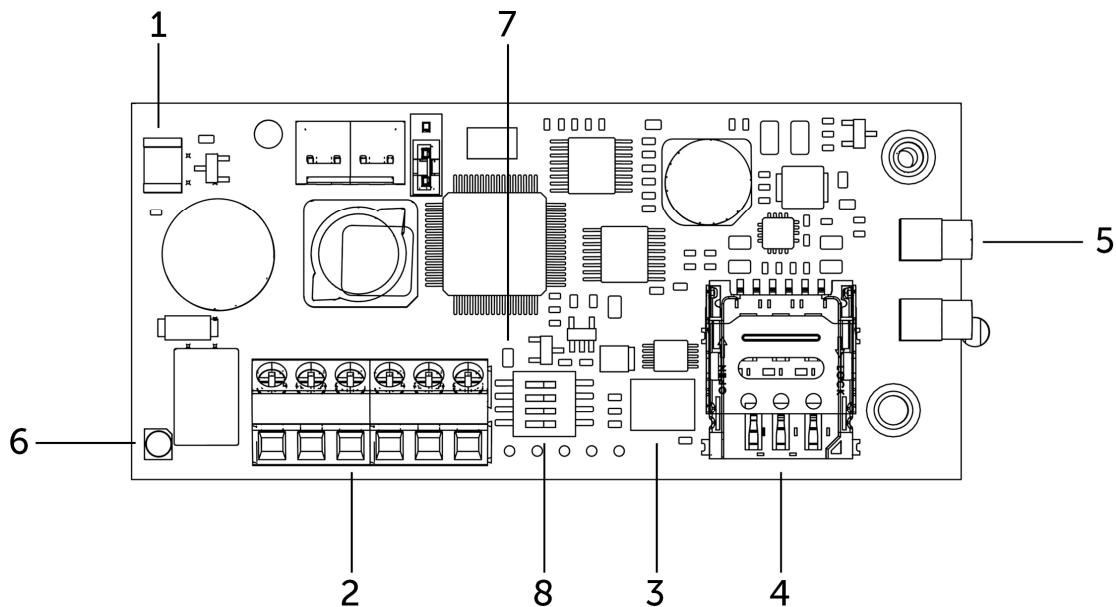
DualCom Pro 4G Radio Module

Product description

The DualCom Pro 4G Radio Module allows you to upgrade an existing/new DualCom Pro installation with an additional 4G signalling path. This Module can be remotely located inside the building using the supplied Radio Module Enclosure by connecting to the RS422 Data-Bus (max cable distance 50m). Locating the Radio Module away from the DualCom Pro enables the installation to benefit from better radio signal in other parts of the building and increases the security of your system.

When using an additional plug on board (i.e. 16 Pin input card or Module Capture Module) you must install the second Radio Module in the Radio Module Enclosure. Where not using an additional plug on board you can plug the Radio Module directly on to the DualCom Pro using the AUX port.

Figure 1 - Diagram



1 - Lid Tamper (Plastic-box mounted)	5 - External Aerial Connectors
2 - RS422 Data-Bus connections	6 - Tri-Colour LED
3 - MIM	7 - Bi-Colour LED
4 - SIM Carrier	8 - DIP switches

LED

Figure 2 – LED Status

Tri-Colour - Large LED

Colour	Mode	Meaning
Blue	Solid	No / Bad SIM
Red	Slow Flash	SIM not registered
Red	Solid	SIM Connected (Not commissioned to infrastructure)
Yellow	Solid	Connected, Commissioned - Communications LOST Comms
Green	Solid	Connected, Commissioned - Communications GOOD Comms
White	Fast Flash	Never seen a working path - BAD Comms

Bi-Colour - Small LED

Colour	Mode	Meaning
Red	Slow Flash	No usable signal
Red	Solid	Poor signal (Signal unreliable)
Amber	Solid	Normal signal
Green	Solid	Good signal
Red / Green	Alternating Blinking	Lost communication with the device
Red	Fast Flash	Power problems

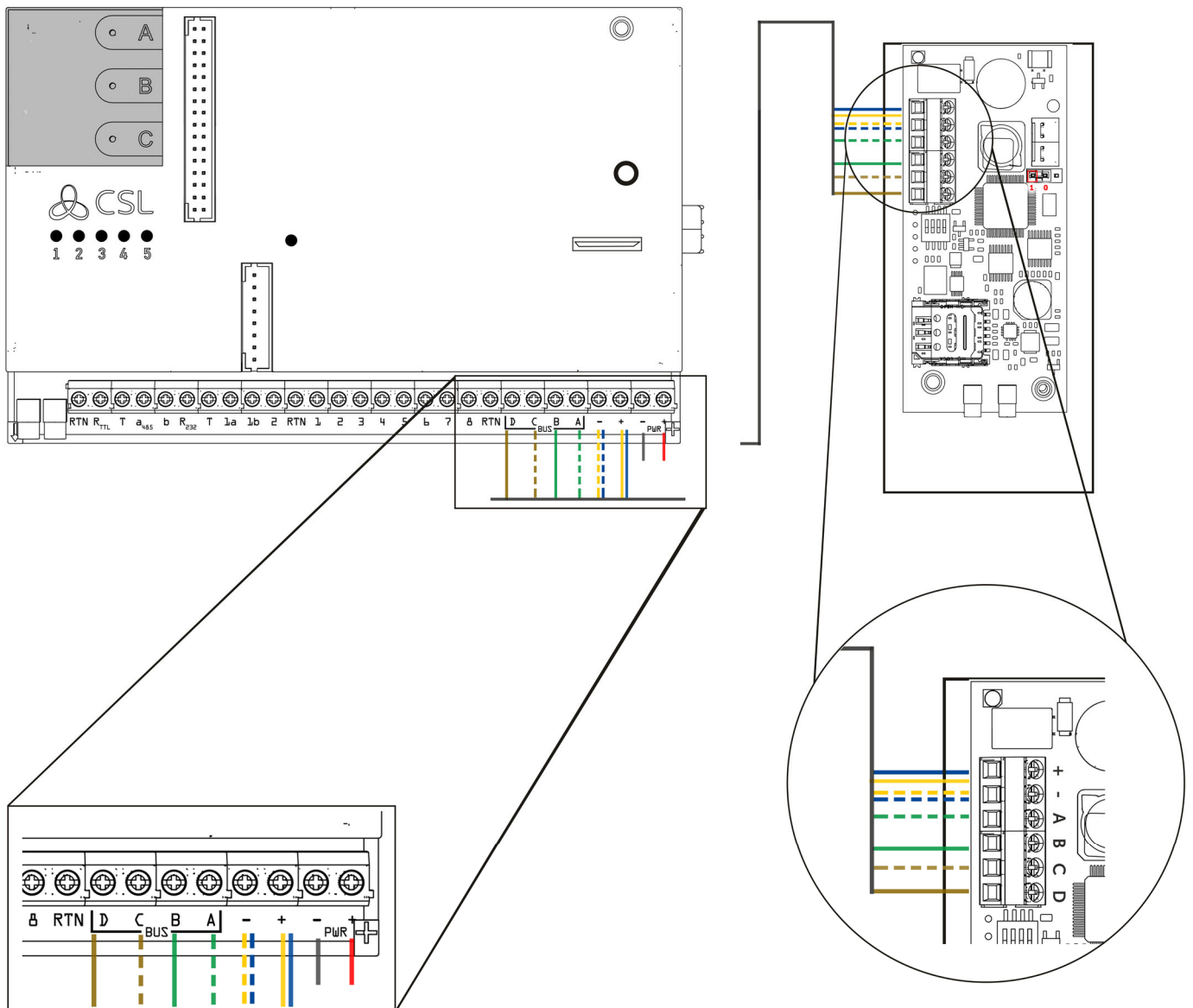
Installation

Option 1

Using the 4G Radio/WiFi Module Enclosure

- Ensure the DualCom Pro and alarm system are powered down before connecting the device
- Connect the cable as per the wiring diagram (Figure 3) using a CAT-5 Cable and wire the aerial
- Power up the alarm system and the DualCom Pro
- Check the LED on the bottom left-hand side of the radio module is green

Figure 2 - Wiring when using the 4G Radio/LAN Module Enclosure

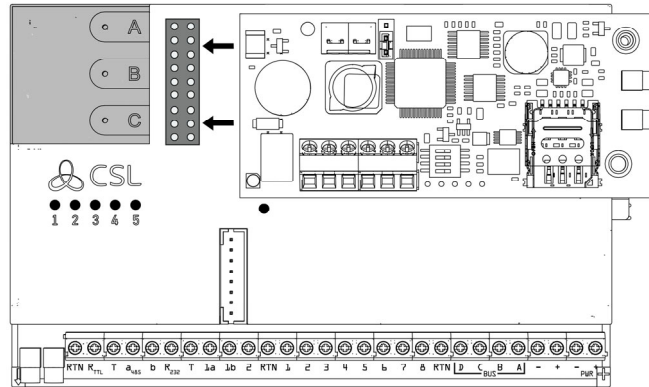


Option 2

Connecting the DualCom Pro 4G Radio Module directly onto the device

- a. Ensure the DualCom Pro and alarm system are powered down before connecting the device
- b. Connect the 4G Radio Module to the AUX port, making sure that it is correctly aligned. Connect the aerial (see Figure 1) and fit the supplied retaining screw to hold the board in place (see Figure 3)
- c. Power up the alarm system and the DualCom Pro
- d. Check the LED on the bottom left-hand side of the radio module is green

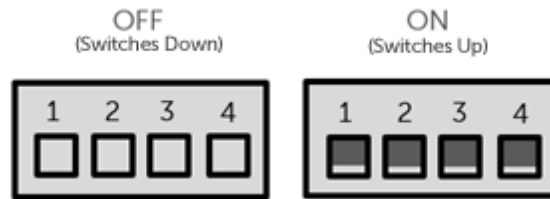
Figure 3 - Connection when connecting the DualCom Pro 4G Radio Module directly onto the device



DIP Switches

The 4G Radio Module has a block of DIP-switches located under the Data-Bus Terminals. The table below describes their functionality.

DIP Switch	
DIP 1	RS422/485 EOL
DIP 2	RS422 EOL



DIP Switch	
DIP 3	RS485 Mode
DIP 4	Menu Switch

For DualCom Pro - DIP 3 should always be off.

DIP 1 and DIP 2 should be set ON when the module is the last device on the RS422 Bus.

NB: DIP 4 switches the 8-segment display between GSM-1 and GSM-2 for the ability to view the signal strength.

Cable Length

Where the 4G Radio Module is taking its power from the DualCom Pro, a maximum cable run of 50 meters must not be exceeded.

If additional cable length is required, a local power source is required to supply the 4G Radio Module with power.

Technical Specifications	
Supply Voltage	13.5v
Current Consumption	35mA (average) 200 mA (max)
Dimension (PCB only)	(L) 85mm x (W) 35mm x (H) 20mm
Weight (Unpackaged)	110g

For more information on DualCom Pro and other products please contact CSL Technical Support:

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