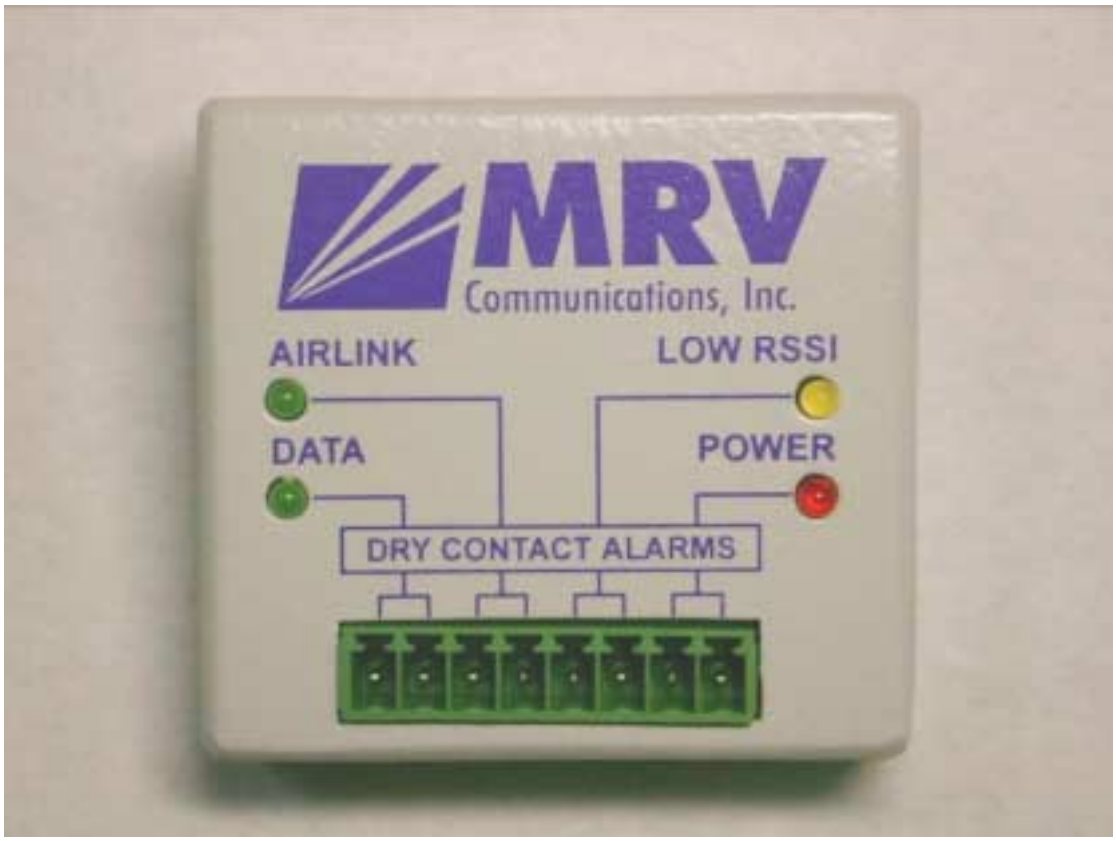
Dry Contact Expansion module

User's Manual



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1. Overview

Dry contact expansion module ("module" below) designed to provide additional information-of Terescope™ units working status. It can be installed on TS802, 807, 811, 940, 960, 3101, 3103, 3303, 4400 Terescope™ models. Connection of module provided trough the 7-pin header connector to the RSM socket of Terescope™ units, and does not requires additional power supply. Module's output is 4 independent pairs of "dry contacts" with open and close states indicating according flag or state. In addition, 4 indication LEDs is also provided for convenience.

Figure 1. Front view

Figure 2. Back view

2. Installation

For installation Module is plugged in the Terescope™ head at the RSM 7-pin socket as shown On fig No.3

Figure 3. Installation of the dry contact expansion module

After insertion of module in the Terescope[tm] head it's LED indicators should show the current state of the next signals:

- "AIRLINK" LED shows the status of the Air link" flag Led.
- "DATA" LED shows the status of the "Electrical/Fiber interface link" Led.
- "LOW RSSI" LED indicates that actual RSSI is lower than determined threshold level,
- "POWER" LED shows the status of the power Led.

At normal working condition, "AIRLINK" and "DATA" LEDs are on, "LOW RSSI" LED is not blinking and "POWER" LED is on.

For wires connection please use supplied 8-pin male plug connector (Phoenix Contact Company's MINI-COMBICON Plug MC 1,5/8-ST-3, 81 Cat. No 1803633). Wires should be 0.5-0.7 mm^2 rigid solid or flexible stranded (23-20 AWG). Screwdriver of blade type 0.4 x 2.5 x 80 mm should be used for accurate connection.

Note: We recommend connecting all wires to plug before plugging it into the dry contact module's socket.

After installing all wires and checking dry contact module's operation, close Terescope™ head 's cover back and fix it with its screws.

3. Functional description and applications

Dry contact alarm is a convenient mechanism that relays link information back to a control station or unit and instantly notifies personnel in case of a defined failure. This states change enables to remote monitoring of basic TereScope unit state.
Applications for the dry contact relay ranges from a simple LED's alarm or sound alarm to a more complex computerized multi-activation system.

Note: The relay contacts are "Normally closed" (~ 15Ω resistance), when alarm is set on the relay switch to "Normally open" and the resistance will be OL (over load).

4. Technical specifications

4.1 Mechanical Dimensions:

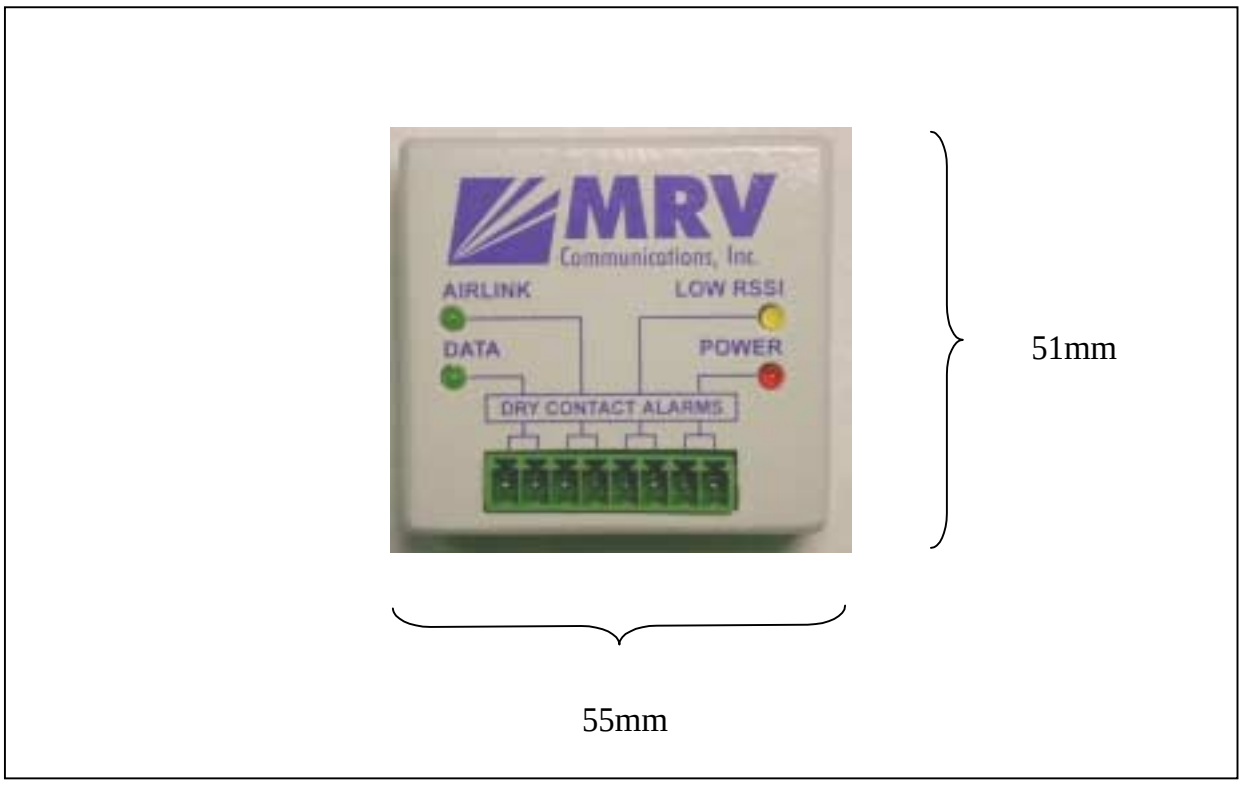

Figure 4. Dimensions of dry contact expansion module

4.2. Electrical characteristics and weight:

Characteristics	Levels
I/O Isolation level	3000 VAC RMS between contacts and all other voltages
Isolation between channels	500 VAC RMS
Contacts Rating	350 VDC or AC Peak, 0.12 A MAX, 0.5W Max
Peak load current	0.4A 0.1sec. Max
Operating temperature	–40°C to +70°C
Typical "ON" resistance	25 Ohm, Max. 35 Ohm
"Snabber" protector	200 Ohm resistor, 1nF/1500 VDC capacitor
Weight	50g

5. *Warranty terms*

This Dry contact module (product) is covered by guarantee against fabrication defects for a period of 12 months from the date of purchase.
In case of any malfunction of the module, Optical Access will repair or replace it with new product.
The postage/transportation costs of the product shipment from the Customer to Optical Access are on the client's account. The remittance expenses of the repaired/exchanged product are on Optical Access account.
This warranty does not cover malfunctions or damages caused by improper handling, unauthorized parts replacement or modifications, wrong use, or functioning in improper environments as well as damages caused by atmospheric ESD discharges.

6. *Standards Compliance*

6.1 European Community EN55022 class B - EMI/RFI radiated emission class B.
6.2 FCC Rules, Part 15,subpart J, FCC Class B (Quasi Peak).
6.3 IEC 529: 1989 Degrees of protection provided by enclosures (IP Code): IP 65 (when installed under the TereScope™ unit's cover and a standard cable inlet flexible duct and flange).