



• DESCRIPTION

Although the Newtec redundancy switches evolved to a fully modular N+1 system (NTC/2185 RSU - series), the market demand for a fixed 1+1 cost-efficient and user-friendly switching unit didn't fade. On the contrary: it appeared that the largest percentage of redundant equipment setups is configured as a 1+1 redundancy.

For this reason Newtec redesigned the original version by copying most of the existing features. Besides it's new type number (NTC/2175/TS), we added the possibility to control the unit via an SNMP agent (with MIB library), while the dry contact closures and serial port access obviously remain available. Most commands used to control the unit remotely are backward compatible with the old NTC/2075.

The NTC/2175/TS redundancy switch is designed as cost-efficient and user-friendly alternative for basic 1+1 redundancy switching providing 2 x BNC cross over switches and a M&C bus. The NTC/2175/TS is compatible with the RMCPv1 commands of the NTC/2075 switching unit. For more complex redundancy switching systems, adding more advanced features, we refer to the NTC/2185/xx series.

• APPLICATIONS

1+1 Tx or Rx redundancy for a modulator or demodulator configuration, where either ASI or G703 signals and IF band (70/140 MHz) signals need to be switched by means of contact closures. This unit is a very cost efficient and most reliable solution for a redundancy system which has to protect a modulator or demodulator in a 1+1 application.

• FEATURES

- 1+1 redundancy switching
- major improvement of complete system mean time between failure
- local M&C via keypad and LCD
- remote M&C via relay contact closures
- remote M&C through Ethernet port (HTTP, SNMP and RMCP v1 & v2) or RS-232/485 serial port (RMCP)
- SNMP agent and MIB file optionally available
- automatic and manual switching mode
- external switch position monitoring via contact closure
- unit A on-line when total power-down default
- dual power supplies
- more than 200 year MTBF
- very compact (height : 4.4 cm)
- cost effective
- CE conform

• OPTIONS (TO BE ORDERED SEPARATELY)

- NTC/4222/AA - alarm cable
- DC-18 GHz coaxial switch - 12 V fail-safe (Sector Microwave type SM7) (placed outside the NTC/2175/TS unit)
- SNMP agent activation

• MODULES

Cross-over switch (NTC/3410.C3)

The NTC/3410.C3 provides cross-over switching of BNC terminated 75 ohm coax lines. Three cross-over switches, SW0, SW1 and SW2, (4 BNC each) are provided. The fully passive switching induces no distortion. See datasheet NTC/3410.C3 for more information.

External switch drive / contact closure detection input (NTC/3410.EB)

The NTC/3410.EB module provides the detection of dry alarm contact switch-overs.

Using the NTC/4222/AA cable, the (normally closed) alarm contacts from up to two modulators can be monitored independently. Both Interface and Unit alarms are monitored.

The NTC/3410.EB module can also be used as a driver for an external switch (e.g. a waveguide switch) or any other device. See the datasheet NTC/3410.EB for more information.

Control

Local/remote control, automatic/manual switching, manual unit selection (A or B), etc.

Monitoring

All control parameters and alarm status for units, power supplies and switches.

• NTC/2075 COMPATIBILITY

User Interface

Display, keypad and menu structure are the same as on the NTC/2185 device and differ from the NTC/2075. LED-indication is the same as on the NTC/2075.

Commands

Although the NTC/2175/TS copies most functionality of its ancestor (NTC/2075), some changes exist in available commands due to hardware/ software restrictions.

Following commands, which were present on the NTC/2075, have been changed:

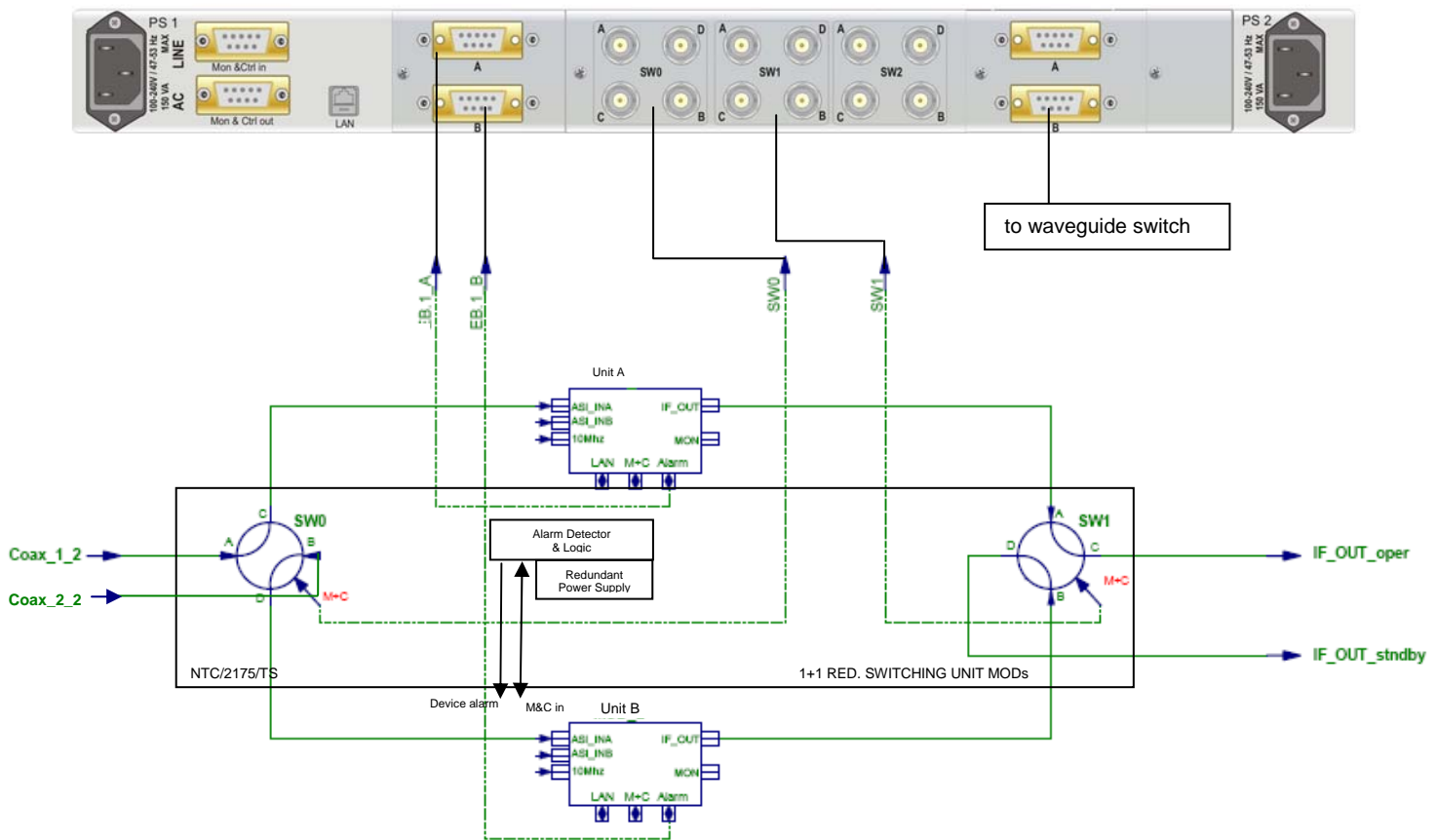
- External Switch alarm monitoring
- External Switch Power Supply
- Alarm controls

Following commands are initialised by their configuration file and are therefore read-only; they cannot be changed:

- Automatic Switching delay
- Startup delay for automatic mode

All alarm sources, present on the NTC/2075, are available on the NTC/2175/TS as well.

BLOCK DIAGRAM



• TECHNICAL LITERATURE & REFERENCES (ALSO AVAILABLE ON OUR WEBSITE)

Other related products

NTC/2185	Universal Switching System – USS
NTC/3410.C3	Triple coax cross-over switch module
NTC/3410.EB	Dual external switch drive / contact closure detection inputs

Application notes

NTC/2075/APN00	Redundancy Switching Unit NTC/2075
NTC/2075/APN01	General MTBF calculation methods

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