CROSS TECHNOLOGIES, INC.


DATA SHEET
REV. B
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## 2582-122 Backup Switch, 1 for 2 with Backup Controller

The 2582-122 is a 1 for 2 Switch with Backup Controller for downloading and storing user variable data settings from the active, on-line agile, IF to RF frequency (to 2.2 GHz ) converters and controlling the back-up frequency converter. The 2582-122 provides Auto or Manual backup protection for up to 2 up or down converters by relay switching of IF and RF from a backup unit to any of 2 on-line units. The controller in the 2582-122 monitors alarms and settings of the on-line units and sets the backup unit to the parameters of the unit being backed up prior to backing it up. The 2582-122 works with standard Cross L-band up and downconverters by polling their monitor and control ports on a periodic basis. A defective unit's inputs and outputs are switched from the failed unit to the backup when a failure occurs either automatically or manually. "On-line", "off-line" and "not used" modes can be programmed for each on-line converter. Alarms are contact closures to ground. Status of the 2582-122 is via a serial data stream and a contact closure to ground on alarm.

All settings are stored in nonvolatile ROM and on power up the $2582-122$ polls all units. Manual Select is controlled by the multifunction switches on the front panel. LEDs indicate alarm and switch conditions. The unit is powered by redundant power supplies, and mounted in a 1 RU rack-mount chassis.


Front Panel

## EQUIPMENT SPECIFICATIONS*

## IF / RF Switch Characteristics

Impedance
Return Loss
Type
Isolation
Switch time Insertion Loss
Configuration
Controls, Indicators
Manual Selection
Remote Selection Power
Alarms
Online/Offline

Other
RF Connectors
IF Connectors
Alarm/Remote Conn's Size

Power
$75 \Omega$
$\geq 12 \mathrm{~dB}, 0.5$ to $2.2 \mathrm{GHz} ; \geq 18 \mathrm{~dB}, 50$ to 200 MHz
Relay
$>55 \mathrm{~dB}$, DC to 1.5 GHz ; > 50 dB , to 2.2 GHz;
$\leq 100$ milliseconds
$\leq 1.5 \mathrm{~dB}$, to $1.5 \mathrm{GHz} ; \leq 2.0 \mathrm{~dB}$, to 2.2 GHz
1 for 2, no termination

Push-button switches
RS 232C (RS 422/485, option Q), 9600 baud Green LEDs
Red LEDs
Green LEDs

Type-F (female) (Option BNC 75 or 50 Ohm) BNC (female) (Option BNC 50 Ohm) DB9 (female)
19 inch, 1RU standard chassis,
1.75 " high X 16.0 " deep
$100-240$ VAC $\pm 10 \%, 47-63 \mathrm{~Hz}$, 45 watts max; Redundant power supplies


Block Diagram

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[^0]:    ${ }^{*}+10^{\circ} \mathrm{C}$ to $+40^{\circ} \mathrm{C}$; Specifications subject to change without notice

