## 2582-282 Backup Switch, 1 for 8

The 2582-282 1 for 8 Switch with Backup Controller provides Auto or Manual backup protection for up to 8 converters by relay switching IF and RF signals from one backup unit to any of 8 on-line units. The controller in the 2582-282 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 2582-282 works with standard Cross Up or 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 converter. Alarms are contact closures to ground. Status of the 2582-282 is reported via a serial data stream (Ethernet, Optional) and a contact closure to ground on alarm.

All user settings of the switch are stored in nonvolatile ROM and on power up the 2582-282 polls all units. Manual Select is controlled by the multi-function switches on the front panel. LEDs indicate alarm and switch conditions. The unit is powered by two $100-240 \pm 10 \%$ VAC redundant power supplies, and housed in a $2 R U$ chassis.


## Front Panel

## EQUIPMENT SPECIFICATIONS*

| IF/L-Band Switch Characteristics |  |
| :--- | :--- |
| Impedance/Return Loss | $50 \Omega />12 \mathrm{~dB}$ Return Loss |
| Type | Relay |
| Isolation | $>55 \mathrm{~dB}, \mathrm{DC}$ to 1.5 GHz |
|  | $>50 \mathrm{~dB}$, to 2.2 GHz |
| Switch time | $\leq 100 \mathrm{milliseconds}$ |
| Insertion Loss | $\leq 1.5 \mathrm{~dB}$, to 1.5 GHz |
|  | $\leq 2.0 \mathrm{~dB}$, to 2.2 GHz |
| Configuration | 1 for 8 , no termination |

RF/L-Band Switch Characteristics
Type
Isolation $\quad>55 \mathrm{~dB}$, DC to 1.5 GHz
$>50 \mathrm{~dB}$, to 2.2 GHz ;
$\leq 100$ milliseconds
$\leq 1.5 \mathrm{~dB}$, to 1.5 GHz ; $\leq 2.0 \mathrm{~dB}$, to 2.2 GHz 1 for 8 , no termination
Configuration

## Controls, Indicators

Manual Selection
Remote Selection

Power
Alarms
Online/Offline


## Block Diagram

## Other

| RF Connectors | SMA (female) |
| :--- | :--- |
| IF/L-Band Connectors | BNC (female) |
| Alarm/Remote Conn's | DB9 (female) |
| Size | 19 inch, 2RU Standard Chassis X 16.0" D |
| Power | $100-240$ VAC, Redundant power supplies |

DB9 (female)
19 inch, 2RU Standard Chassis X 16.0 " D 100-240 VAC, Redundant power supplies

Push-button switches
RS 232C (Optional RS 422/485
Option Q; Ethernet Option W8)
Green LEDs
Red LEDs
Green LEDs / Yellow LEDs
${ }^{*}+10^{\circ} \mathrm{C}$ to $+40^{\circ} \mathrm{C}$; Specifications subject to change without notice

