DATA SHEET

## 2582-344 Backup Switch, 1 for 4

The 2582-344 1 for 4 Switch with Backup Controller provides Auto or Manual backup protection for up to 4 converters by relay switching two IF and one RF signal from a backup unit to any of 4 on-line units. The controller in the 2582-344 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 setting of on-line and backup units can be displayed on the 2582-344 display. The 2582-344 works with standard Cross up and downconverters by polling their monitor and control ports on a periodic basis. Manual polling of units can be done at any time. A defective unit's inputs and outputs are switched from the failed unit to the backup when a failure occurs either automatically or manually. Individual priority levels and "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 2582-344 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 $2582-344$ 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 2RU chassis.


## Front Panel

## EQUIPMENT SPECIFICATIONS*

| IF/L-Band Switch Characteristics |  |
| :--- | :--- |
| Impedance | $50 \Omega$ |
| Return Loss | $>12 \mathrm{~dB}$ |
| Type | Relay |
| Isolation | $>55 \mathrm{~dB}, \mathrm{DC}$ to 1.5 GHz |
|  | $>50 \mathrm{~dB}$, to $2.2 \mathrm{GHz} ;$ |
| Switch time | $\leq 100$ milliseconds |
| Insertion Loss | $\leq 1.5 \mathrm{~dB}$, to 1.5 GHz ; |
|  | $\leq 2.0 \mathrm{~dB}$, to 2.2 GHz |
| Configuration | 1 for 4 , no termination |

RF Switch Characteristics

Impedance
$50 \Omega$
Return Loss
Type
Isolation
Switch time
Insertion Loss
Configuration
Controls, Indicators
Manual Selection
Remote Selection
Power
Alarms
Online/Offline $>12 \mathrm{~dB}$

RF Transfer $>60 \mathrm{~dB}$, to 15 GHz $\leq 100$ milliseconds $\leq 1.5 \mathrm{~dB}$, to 8 GHz ; $\leq 2.0 \mathrm{~dB}$, to 15 GHz 1 for 4, no termination


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 |

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

