Cross technolo
CROSS TECHNOLOGIES, INC.


DATA SHEET

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## 2582-143 Backup Switch, 1 for 4

The 2582-143 1 for 4 Switch provides Auto, Remote, or Manual backup protection for up to 4 block converters by using a combination of IF/L-Band relay switches and RF transfer switches for signals from a backup unit to any of the 4 online units. The 2582-143 works with standard Cross block 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 unit either automatically (when an alarm is detected from the failed unit), remotely or manually. Manual switching overrides Remote and Auto switching, while Remote switching overrides Auto switching. Manual selection is made by the front panel multifunction, push-button switches. Remote selection is made via a rear panel female DB9 connector. The $2582-143$ is powered by redundant $100-240 \pm 10 \%$ VAC power supplies and is housed in a 1.75 " $X 19$ " $X 16$ " 1 RU rack mount chassis.


Front Panel

## EQUIPMENT SPECIFICATIONS*

## IF/L-Band Switch Characteristics

| Impedance | $50 \Omega$ |
| :--- | :--- |
| Return Loss | $>12 \mathrm{~dB}$ |
| Type | Relay |
| Isolation | $>55 \mathrm{~dB}$, 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 $1.5 \mathrm{GHz} ;$ |
|  | $\leq 2.0 \mathrm{~dB}$, to 2.2 GHz |
| Configuration | 1 for 4 , no termination |

RF Switch Characteristics

| Impedance | $50 \Omega$ |
| :--- | :--- |
| Return Loss | $>12 \mathrm{~dB}$ |
| Type | RF Transfer |
| Isolation | $>60 \mathrm{~dB}$, to 15 GHz |
| Switch time | $\leq 100 \mathrm{milliseconds}$ |
| Insertion Loss | $\leq 1.5 \mathrm{~dB}$, to 8 GHz |
|  | $\leq 2.0 \mathrm{~dB}$, to 15 GHz |
| Configuration | 1 for 4 , no termination |

Controls, Indicators
Manual Selection
Remote Selection
Push-button switches
RS 232C (RS 422/485, option Q), 9600 baud


Block Diagram

Power
Alarms
Online/Off-line

Green LEDs
Red LEDs
Green LEDs

## Other

| RF Connectors | SMA (female) |
| :--- | :--- |
| L-Band Connectors | BNC (female) |
| Alarm/Remote Conn's | DB9 (female) |
| Size | 19 inch, 1 RU standard chassis $1.75 "$ high $X 16.0 "$ deep |
| Power | $\mathbf{1 0 0 - 2 4 0} \pm 10 \%$ VAC, 47-63 Hz, 45 watts max.; Redundant power supplies |

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

