## **CROSS TECHNOLOGIES, INC.**

## DATA SHEET

REV\_C 11/10/09

## 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 ±10% VAC power supplies and is housed in a 1.75" X 19" X 16" 1RU rack mount chassis.

0		1 2 3 4 BU	
	POWER ALARMS	ONLINE / OFFLINE NOR A A A A A	
		ONLINE / OFFLINE MODE A A A   Image: Original content of the state	
$\Box$	1 2 1 2 3 4 BU SW	1 2 3 4 BU	
Front Panel			
EQUIPMENT SPECIFICATIONS*			
IF/L-Band Switch Characteristics			
	Impedance	50 Ω	IN/ CONV IN/ CONV IN/ CONV IN/ CONV OUT OUT OUT OUT
	Return Loss	> 12 dB	
	Туре	Relay	
	Isolation	> 55 dB, DC to 1.5 GHz	
		> 50 dB, to 2.2 GHz;	
	Switch time	≤ 100 milliseconds	0
	Insertion Loss	≤ 1.5 dB, to 1.5 GHz;	
		≤ 2.0 dB, to 2.2 GHz	IN/OUT IF/L-BAND CONVERTER
	Configuration	1 for 4, no termination	
	Ū		IF/L-BAND IN/OUT
PE Switch Characteristics			
	Impedance	50 Ω	IF/L-BAND IN/OUT
	Return Loss	> 12 dB	
	Туре	RF Transfer	CH 2 IF/L-BAND IN/OUT
	Isolation	> 60 dB, to 15 GHz	IN/OUT CONVERTER
	Switch time	≤100 milliseconds	
	Insertion Loss	≤ 1.5 dB, to 8 GHz;	
		≤ 2.0 dB, to 15 GHz	CONTROL
	Configuration	1 for 4, no termination	
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Controls, Indicators			UNIT UNIT UNIT UNIT BU SW ALÂRM 1 2 3 4 UNIT NVC
	Manual Selection	Push-button switches	REMOTE and ALARM
	Remote Selection	RS 232C (RS 422/485, option Q), 9600 b	baud Block Diagram
	Power	Green LEDs	<u></u>
	Alarms	Red LEDs	
	Online/Off-line	Green LEDs	
		0.000.1220	
Other			
	RF Connectors	SMA (female)	
	L-Band Connectors	BNC (female)	
	Alarm/Remote Conn's		
	Size	19 inch, 1RU standard chassis 1.75" high	X 16.0" deep
	Power	100-240 ±10% VAC, 47-63 Hz, 45 watts n	
		s subject to change without notice	