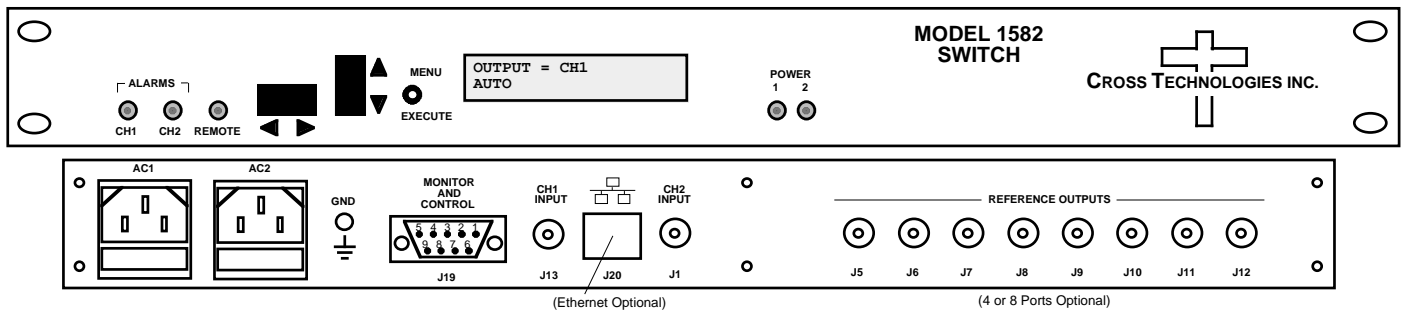**CROSS TECHNOLOGIES, INC.**

1582-10xx 1:1 Switch, 10 MHz

The 1582-10xx 1:1 Switch/Distribution unit supports Dual (monitored), 10 MHz External Reference Inputs with Auto (Standard or Minimum Auto Switching (MAS) modes), Local (Manual) or Remote relay switching between CH1 and CH2. The unit provides, either one (xx=01), four (xx=04) or eight (xx=08) 10 MHz reference outputs. Alarm conditions monitored on CH1 and CH2 are a level drop below -6 dBm of the 10 MHz signal.

When power is lost and when power is applied (as alarms at power up dictate), CH1 is selected. Front panel LEDs indicate CH1 and CH2 alarms, Remote Enabled (yellow), and Redundant Power supplies on (green). Multi-function push button switches select Auto (MAS=ON/OFF), Local (Manual), or Remote operation and the Channel selected. Remote operation via the RS232/RS422/RS485 (Ethernet optional) M&C interface allows selection of CH1 or CH2 and indicates switch position and alarm status. A contact closure to ground indicates if either or both CH1 and CH2 are in alarm. An LCD display shows mode of operation and the currently selected channel. Connectors are BNC, female for the 10 MHz signals and DB9 for M&C and for the alarm contact closure output. (RJ-45 for Ethernet.) The 1582-10xx is a 1RU chassis with redundant power supplies fed by separate fused 100-240 ±10% VAC AC input connectors.

1582-10xx FRONT AND REAR PANEL

1582-10M Technical Specifications

Switch Characteristics

Impedance	75 ohms
Type	Non-latching Relay
Isolation	>50 dB DC to 10 MHz
Switchlevel/time	≤-6±1dB / ≤100 milliseconds
Insertion Loss	≤1 dB
Configuration	SPDT

Alarm and Control, M&C

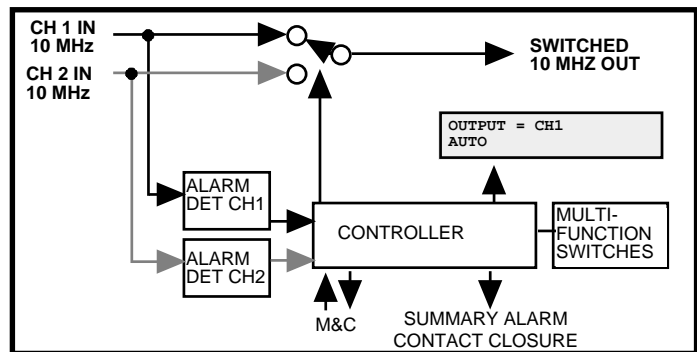|	
Alarm output signal	Form C relay: 30VDC, 0.5A max
M & C Interface	RS232C, RS422, or RS485, Selectable, (Ethernet Optional)
M & C Signal	38.4 kB baud rate

1582-10xx BLOCK DIAGRAM

Controls, Indicators

Mode Select	Local/Remote, Auto/Manual - push-button switches, contact closures, or remote selection
Power On Status	Green LEDs, (PS1, PS2),
Remote Select Status	Yellow LED, M&C serial
Manual Select Status	M&C serial
Alarm Status	Red LEDs , External Form C contact closure, M&C serial

Connectors, Other

Ext. Alarm, M&C Conn.	DB9 (female)
10 MHz In/Out	BNC, female, 75 ohm
Size	1 RU, 19 inch standard chassis 1.75" high X 16.0" deep
Power	Redundant 100 - 240±10% VAC, 47 - 63 Hz, 20 W max. power supplies

Optional

- 4	4 - 75Ω outputs
- 8	8 - 75Ω outputs
- W8	Ethernet M&Cz
- D	50Ω BNC

*10˚C to 40˚C; Specifications subject to change without notice