

### Highlights

- E1 1 for 1 automatic protection switch
- Point-to-Point diverse route and self-healing ring applications
- One ended switch for self-healing ring loop applications
- Switch selectable revertive and non-revertive loop applications
- Switch selectable delays and BER thresholds
- Switch selectable for CRC4, CCS or CAS formats
- Line Status monitoring
- Local and remote control of switching function
- Connectorized user connections
- (1) E1 and (6) E1 terminal configurations
- OOF, LOS, AIS and BER switching criteria, user selected priority
- Front panel manual switch control
- Central Office alarming
- Seven segment display, BER, alarms & status

The **CXR/Larus 5703 RouteSwitch™** is an E1 automatic protection single ended switch that provides cost effective, self-healing network capabilities in the event of cable cuts, electronic or node failures. The E1 RouteSwitch ensure the highest quality received E1 signal at all times.

The E1 RouteSwitch offers the advantages of a single end switching, non-revertive and revertive, selectable switching delays, and selectable Bit Error Rate (BER) switching thresholds. The RouteSwitch also features default switching criteria and redundant power modules.

The E1 RouteSwitch provides protection for specific E1s by duplicating transmitted signals over separately routed diverse physical facilities or different transmission media. The 5703 delivers the better of the two received signals to the E1 equipment. Compatible with different E1 CCS and CAS formats, the 5703 system accepts both AMI and HDB3 line coding.



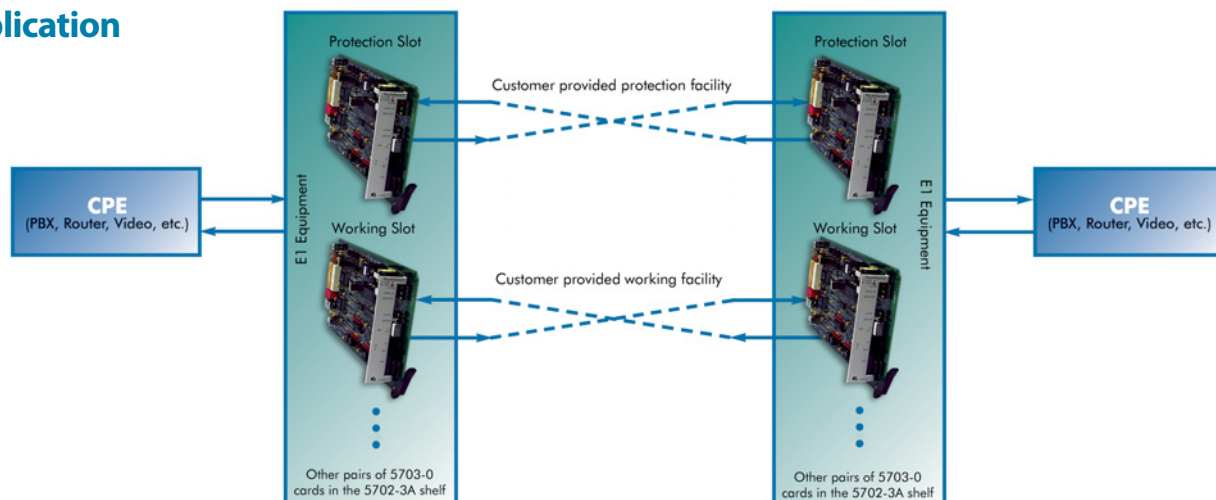
A seven segment display, visible on the front panel of the 5703, indicates BER and also displays other characters, to indicate alarm and circuit pack status to aid in troubleshooting.

Switching criteria can be configured to user requirements. The criteria to switch from a primary channel to a protection channel are the detection of a Loss of Signal (LOS), Out of Frame (OOF) event, Alarm Indication Signal (AIS), or BER threshold being met or exceeded on the primary channel.

Two E1 RouteSwitch circuit packs are required at each end of the facilities, one to monitor the primary channel and one to monitor the protection channel. Shelf position determines the primary or protection function.

The 5703 is available in three shelf arrangements; the RouteSwitch Distant Terminal, a two circuit pack, horizontal mount for 19-inch racks; a 12 slot, 19-inch shelf Central Office Terminal.

### Application



# CXR/Larus 5703 RouteSwitch

## Specifications

### DATA FORMAT

- CRC4 Enable/Disable
- AMI or HDB3
- CCS or CAS

### PORT IMPEDANCE

100 ohms nominal @ 1024kHz

### INPUT BIT RATE

2.048Mbps, ±75bps, bipolar

### INPUT SIGNAL RATE

- -7.5dBV to +3dBV, E1
- 0 dBV = 6 volts p-p across 120 ohms

### OUTPUT PULSE AMPLITUDE

6 V p-p (±3V, ±0.3V)

### REGENERATED LINE SIGNAL OUTPUT

Per G.703

### CENTRAL OFFICE ALARMS

- Major audible and visual
- Minor audible and visual

### FUSE ALARMS

- Local (CO) Closure to battery
- Remote (E2A) Closure to ground

### FRONT PANEL INDICATORS

- ALARM: LED Red
- E1 IN: LED Green
- SWITCHED: LED Yellow
- ACTIVE: LED Green
- BER: Seven segment display
- DIAGNOSTICS: Seven segment display

### CIRCUIT PACK SELECTABLE FEATURES

- SWITCH/MANUAL
- REVERTIVE/NON REVERTIVE
- AMI/HDB3
- HARD FAIL DELAY
- SOFT FAIL DELAY

### RESET SWITCH (CO TERMINAL SHELVES)

Audible Alarm Cutoff (ACO)

### ACO INDICATOR (CO TERMINAL SHELVES)

LED: Yellow

### ENVIRONMENTAL

- Operating Temperature: -40° to 167°F (-40° to +75°C)
- Storage Temperature: -40° to +175°F (-40° to +85°C)

### RELATIVE HUMIDITY

0 to 95%, noncondensing

### PHYSICAL

- Power: 48 VDC, 110 mA per circuit pack, alarmed
- Power Consumption: 5.5 W per circuit pack
- Power Fuse (Circuit Pack): 0.5 A
- Circuit Pack Dimensions (Dimensions [L x H x W] / Part Number):  
9.5 in x 5.0 in x 1.40 in / 5703-1
- Shelf Dimensions (W x D x H):  
19.0 in x 12.0 in x 1.75 in (1 E1) / 5703-2  
19.0 in x 12.0 in x 5.25 in (6 E1s) / 5703-3
- Circuit Pack Weight (Weight/Part Number):  
12 oz. / 5703-1
- Shelf Weight:  
5.6 lbs. fully equipped / 5703-2  
14.5 lbs. fully equipped / 5703-3

## Ordering Configurations

Model	Description
5703-0	Circuit Pack
5703-2A	Distant Terminal, 19-in shelf, 1 E1 ((includes circuit packs)
5702-3A	CO Terminal, 19-in shelf, 6 E1s (shelf only)