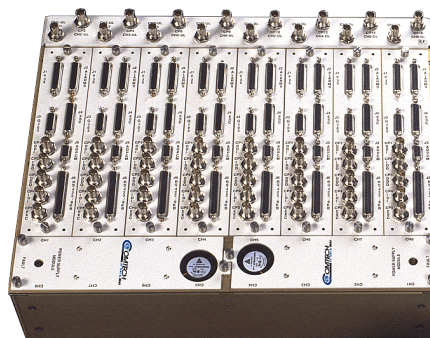




**Main SMS-7000 Control Unit**



**SMS-7000 Switch Unit**

### INTRODUCTION

- Universal Data Interfaces Available at the Switch
- Programmable Independent/Dependent Switch Modes
- Programmable Modem Priority
- Programmable Switching Delay
- Remote Monitor and Control (M&C)
- Optimized Customer IF Configuration
- High-Speed Remote Control

### DESCRIPTION

Comtech EF Data's SMS-7000 M:N protection switch uses fewer cables and occupies less rack space than the previous generation of M:N switches. The SMS-7000 is designed to allow maximum flexibility by incorporating a Universal Terrestrial/User interface.

The SMS-7000 is composed of a control unit and switch unit. A single control/alarm cable connects both units. The control unit (1 RU) is mounted in the front of the rack and the switch unit (8 RU) can be installed in the rear or top of the rack. The control unit gives the user maximum control of the switch in the smallest amount of front-side rack space. The control unit contains an extensive M&C system and is fully controllable from the front panel or from the external RS-232/485 port located on the backside of the control unit.

The switch unit is mounted on a locking hinge, allowing the unit to be tilted from the rack. This allows easy access to back plane connectors and to equipment in the rack. The switch unit supports industry standard interfaces, eliminating the need for a separate breakout panel.

The IF section of the switch unit is from 50 to 180 MHz on the uplink and the downlink side, allowing for both narrow band and wideband transponders to be served.

The SMS-7000 can be configured for up to eight prime modems and two backup modems, with dedicated IF uplink and downlink ports for each channel. This feature enables the lowest possible loss of signal, while giving the user maximum flexibility in routing IF signals to/from their desired feeds. The switch allows IF and data signals of any prime modem to be switched to the next available backup modem, and for priority programming of the prime modems for backup.

The SMS-7000 is compatible with most Comtech EF Data modems and support products. Please contact your Comtech EF Data sales representative to determine product compatibility specific to your application.

### CRS-280L 1:N L-Band Redundancy Switch

An L-band redundancy switch, the CRS-280L, is available to support the SDM-300L3 modem. This unit provides 1:N protection.



Contact Comtech EF Data Customer Support and/or see the CRS-280L datasheet for more information.



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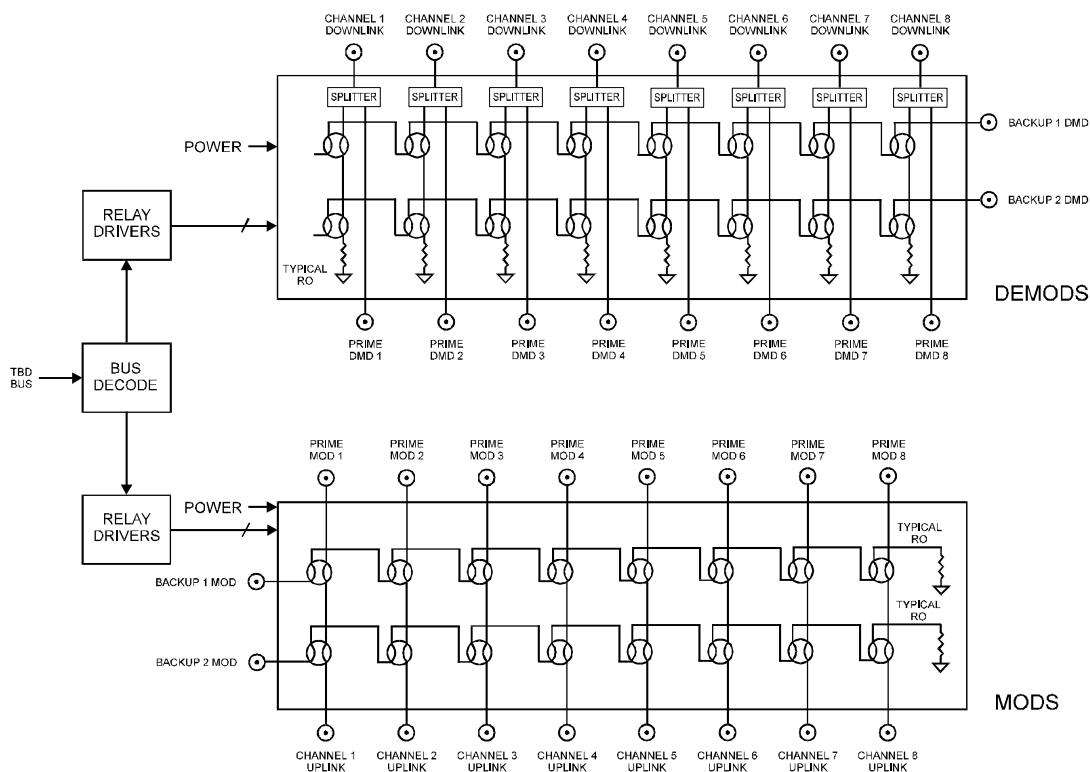
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## SYSTEM

Frequency Range	50 to 180 MHz
Impedance at IF Ports	75Ω (50Ω optional)
Return Loss	≥ 18 dB
Transmit IF Loss	< 1.5 dB
Receive IF Loss	< 5 Db
Online Modems	Expandable from 1 to 8 with plug-in panels
Backup Modems	1 or 2
Data Interface	RS-422/499 (MIL-STD-188), V.35, 8 kbps, G.703 balanced/unbalanced
Auxiliary Interface	ADPCM Audio, ESC, Alarms
Operating Modes	Dependent or Independent Switching (Programmable)
Compatibility:	
CRS-280L (Available)	L-band redundancy switch (SDM-300L3 only) See CRS-280L datasheet
SDM-100, 300, 300A, 308, 309, 650, 6000, 8000	Non L-Band , 50-Pin Interface
SLM-3650, 6650, 8650	Non L-Band , 50-Pin Interface

Control Unit:	
Size:	19" W x 20.1" D x 1.7" H (1 RU) (48.2 cm x 51.0 cm x 4.3 cm)
Weight:	< 10 lbs (4.5 kg)
Switch Unit:	
Size:	19" W x 4.5" D x 13.9" H (8 RU) (48.2 cm x 11.4 cm x 35.3 cm)
Weight:	< 20 lbs (9.0 kg)
Input Voltage:	
AC	90 to 264 VAC, 50 to 60 Hz, 50W max.
DC	48 VDC, 50W max.
Output Backup Modulator	Within ± 0.25 dB of prime when switched online
Modem Priority	Three Levels, programmable
Remote M&C Interface	RS-485 or RS-232C
Control & Monitor	Control and monitor of all switch functions via front panel or remote interface
Transponders	8 uplinks, 8 downlinks

### IF Switch Block Diagram



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