



## FEATURES

- 1:1 Configuration
- High-Rate Applications

## APPLICATIONS

The SMS-451 is an automated 1:1 protection switch for high data rate SDM-2020 and SDM-9000 satellite modems.

The SMS-451 simultaneously switches data and IF. The switch can be ordered with either independent or dependent switching of modulator and demodulator.

If a fault is detected in the online modulator or demodulator, a switch to the offline modem will occur. The switching will only occur if the backup is not in a faulted condition. Transmit data is buffered and sent to the backup modem by the switch to prevent false transmit fault indications. Switching is accomplished in under 100 ms. Front panel indicators show primary and backup modulator and demodulator status for easy reference.

Control of switch functions can be performed either locally at the front panel or remotely via the remote interface. Switch functions include selection of automatic or manual switching, choosing online modulator or demodulator, and selecting local or remote mode.

The front panel LEDs display which modulator and demodulator are online. The LEDs also show if either modulator or demodulator has an uncorrected fault, the operational status of the SMS-451 redundant power supplies, and whether the switch is in local or remote mode.

## OTHER FEATURES

- Switches Modulator and Demodulator Automatically
- Controls Local/Remote, Automatic/Manual Interfaces
- Redundant Power Supplies and AC Inputs
- Allows Simple Installation

## SPECIFICATIONS

Data Interface	G.703
Options	ASI
	HSSI (<52 Mbit/s)
Operation Modes	Auto/Manual, Local/Remote
Power	90 to 264 VAC, 10W max.
Size	19 inch W x 18 inch D x 3.5 inch H (2 RU) (48.2 x 45.7 x 8.9 cm)
Weight	10 lbs. (4.53 kg)

## CONTROLS

Switch	Remote/Local
Modulator	A/B online select or auto
Demodulator	A/B online select or auto

## INDICATORS

Power Supplies	1/2 ON
Remote Control	Remote/Local mode
Modulator	A/B online, A/B fault
Demodulator	A/B online, A/B fault

## MONITOR & CONTROL

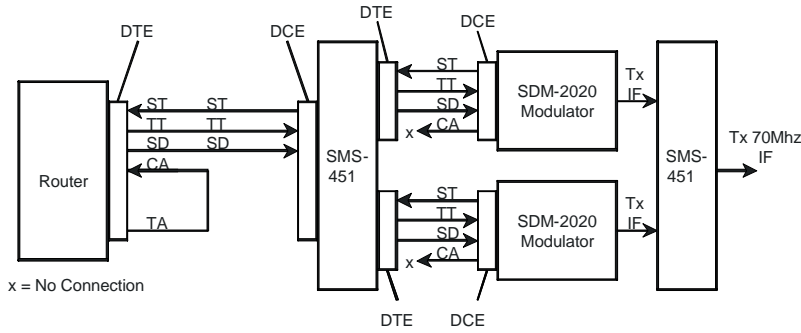
Remote Monitor	Form C contacts provided on 25-pin D connector for A/B online modulator indicator, A/B online demodulator indicator, and local/remote mode
Remote Control	Via external contact closure for A/B select modulator and A/B select demodulator



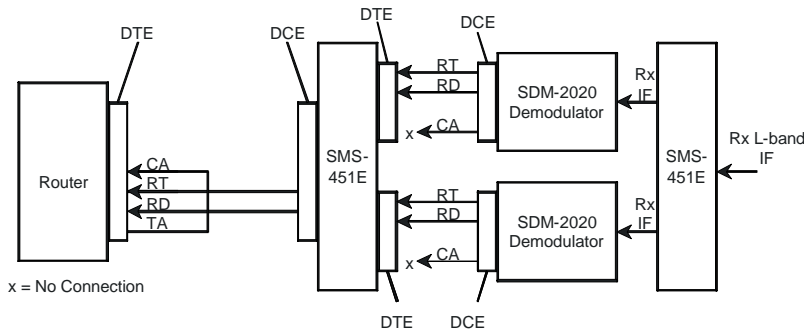
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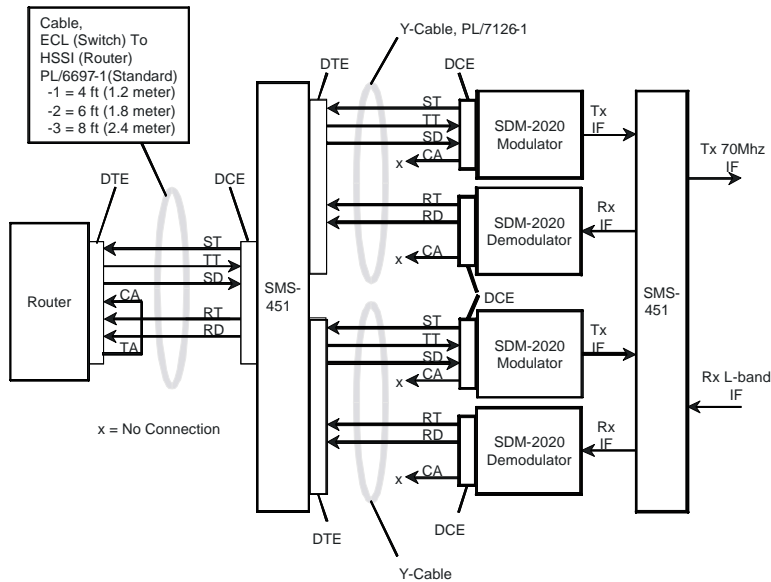


**Tx Simplex**



**Rx Simplex**

**Typical Simplex Connection Of The SDM-2020 With HSSI Interfaces And SMS-451**



**Typical Full Duplex Connection Of The SDM-2020 With HSSI Interfaces And SMS-451**



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