

7702BPX-IF

2x1 RF Protection Switch for IF Frequencies

The 7702BPX-IF RF protection switches for IF frequencies provide automatic changeover functionality to provide bypass protection for RF signals from 10–850MHz. Typical applications include main/standby failover protection for 70/140MHz uplink applications.

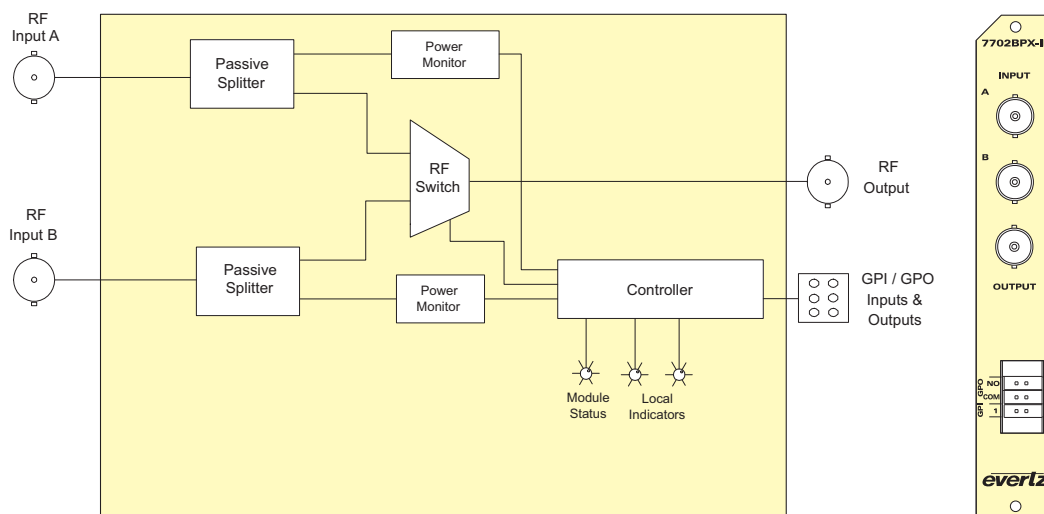
When used for automatic changeover, the 7702BPX-IF have a Main input and a Standby input. It will automatically switch to the Standby input when the Main input power is weak or lost. Switch back to the Main input when the signal is

re-established may be configured to happen automatically or manually. The 7702BPXA-IF may also be configured to operate manually as a 2:1 switch, which may be controlled locally or remotely via GPI.

The 7702BPX-IF occupy one card slot and can be housed in the 1RU 7801FR frame which holds up to 4x single- or two dual-slot modules, the 3RU 7800FR frame which has a 15x slot capacity, the portable 3RU 350FR frame which has a 7x slot capacity, or a standalone enclosure which holds a single module.

Features & Benefits

- Intelligent auto switching with input power detection
- Maintains switch state and RF channel on loss of power to card or frame
- Supports automatic or manual control via GPI
- Card edge LEDs indicate active input channels, output channel and power levels below threshold
- Switch state indication via GPI
- Fully hot-swappable from front of frame
- Wide operating frequency range, 950–2250MHz
- Comprehensive signal and card status monitoring via four-digit card edge display



Specifications

RF Input/Output:	General Purpose Inputs:	General Purpose Outputs:
Inputs: 2	Number of Inputs: 2	Number of Outputs: 1
Outputs: 1	Type: Opto-isolated, active low with internal pull-ups to +5V	Type: "Dry contact" relay contacts — normally open and normally closed contact provided
Connector: BNC per IEC 61169–8 Annex A (F-Type and SMA optional)	Connector: 2 pins plus ground on 6-pin terminal strip	Connector: 3 pins on 6-pin terminal strip
I/O Impedance: 75Ω, 50Ω optional	Signal Level:	Electrical:
Frequency Response:	+5V Pull-up: Low: –5 to 2.5V DC	Voltage: +12V DC
10–200MHz: < ±0.25dB	High: 3.5–10V DC	Power: 3W
10–850MHz: < ±0.5dB	+12V Pull-up: Low: –5 to 9.5V DC	Physical:
Insertion Loss: < 4dB	High: 10.5–15V DC	Number of Slots: 1
Return Loss:	Max Sink Current: 15 mA (input shorted to ground)	
10–200MHz: < 15dB	Max Leakage Current for Input High: 200µA	
10–850MHz: < 12dB		
Isolation: > 45dB		
Input Power Range: 0dBm to –50dBm		

Ordering Information

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Connector Suffix:
+F75 75Ω F-Type

Note: 75Ω I/O impedance ships standard. Rear plate and fiber connector type must be specified at time of order, eg: model +SC +3RU.

Enclosures:
350FR Portable multiframe, holds up to 7x single-slot modules
7700FR-C 3RU multiframe, holds up to 15x single-slot modules
7800FR 3RU multiframe, holds up to 15x single-slot modules
7701FR 1RU multiframe, holds up to 3x single- or dual-slot modules
S7701FR 7700 Series standalone enclosure

Rear Plate Suffix:
+3RU 3RU rear plate for 350FR, 7700FR-C or 7800FR multiframe
+1RU 1RU rear plate for use with 7701FR multiframe
+SA Standalone enclosure rear plate