7702BPX-IF & 7703BPX-IF
2x1 RF Protection Switch for IF Frequencies

The 7702BPX-IF and 7703BPX-IF 2x1 RF protection switches for IF frequencies provide automatic changeover functionality to provide bypass protection for RF signals from 10MHz to 850MHz. Typical applications include main/standby failover protection for 70/140MHz uplink applications.
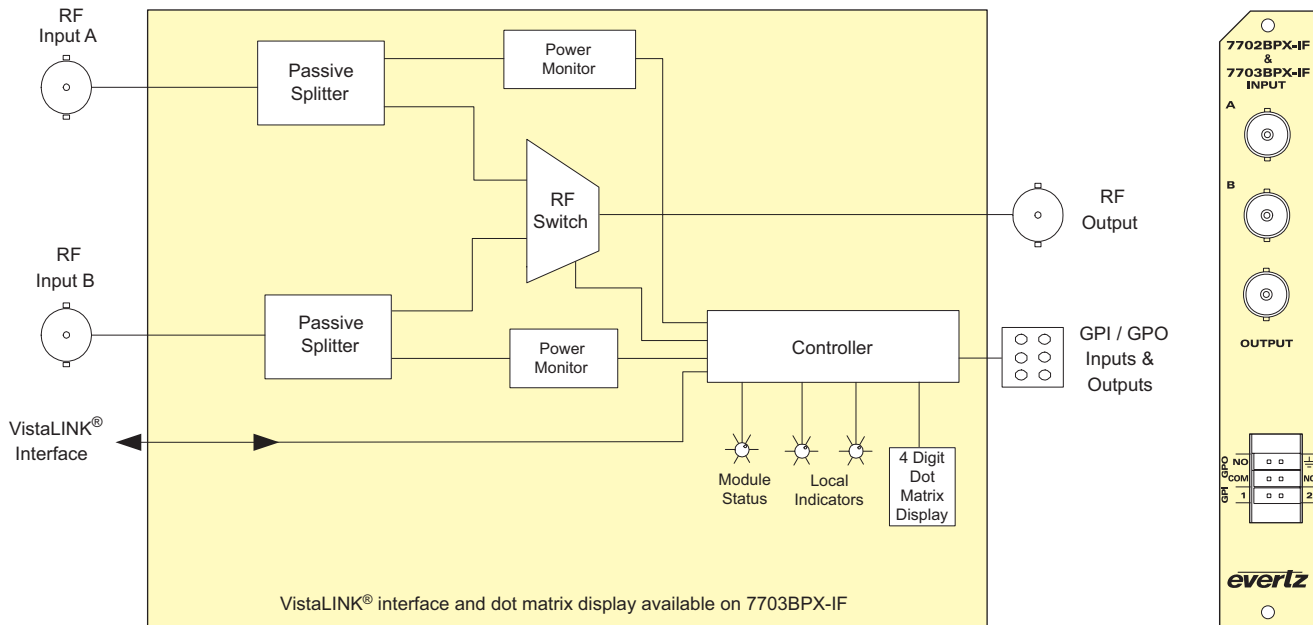
The 7703BPX-IF has integrated VistaLINK® technology for remote control and monitoring capability via SNMP. This provides the ability to locally or remotely configure and monitor parameters such as module status, selected input, power level and switching threshold.

When used for automatic changeover, the 7702BPX-IF and 7703BPX-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 7702/7702BPX-IF may also be configured to operate manually as a 2:1 switch, which may be controlled locally or remotely via GPI or SNMP (7703 model only).

The 7702BPX-IF and 7703BPX-IF occupy one card slot and can be housed in a 1RU frame that will hold up to 3 modules, a 3RU frame that will hold up to 15 modules, a 350FR portable frame that will hold up to 7 modules or a standalone enclosure which holds 1 module.

▶Features & Benefits

- Wide operating frequency range, 10MHz to 850MHz
- Intelligent auto switching with input power detection
- User-definable threshold levels on 7703BPX-IF version
- Maintains switch state and RF channel on loss of power to card or frame
- Supports automatic or manual control via GPI or SNMP on 7703BPX-IF
- Switch state indication via GPO
- Card edge LEDs indicate active input channels, output channel and power levels below threshold
- Fully hot-swappable from front of frame
- Comprehensive signal and card status monitoring via four digit card edge display or remotely through SNMP and VistaLINK® on 7703 version
- VistaLINK® capability is available when 7703BPX-IF modules are used with the 3RU 7800FR or 350FR portable frame and a 7700FC VistaLINK® Frame Controller module in slot 1 of the frame

VistaLINK® interface and dot matrix display available on 7703BPX-IF

▶Specifications

RF Input/Output:

Inputs:	2
Outputs:	1
Connector:	1 BNC per IEC 61169-8 Annex A (F-type and SMA optional)
I/O Impedance:	75Ω , 50Ω optional

Frequency Response:
10-200MHz:	< ±0.25dB
10-850MHz:	< ±0.5dB
Insertion Loss:	< 4dB

Return Loss:
10-200MHz:	< 15dB
10-850MHz:	< 17dB
Isolation:	> 50dB (10-850MHz)
Input Power Range:	0dBm to -50dBm

General Purpose Inputs:

Number of Inputs:	2
Type:	Opto-isolated, active low with internal pull-ups to +5V
Connector:	2 pins plus ground on 6-pin terminal strip

Signal Level:
+5V Pullup:	Low: -5 to +2.5V DC, High: 3.5 to 10V DC
+12V Pullup:	Low: -5 to +9.5V DC, High: 10.5 to 15V DC
Max Sink Current:	(input shorted to ground) 15 mA
Max Leakage Current for input High:	200µA

General Purpose Outputs:

Number of Outputs:	1
Type:	"Dry Contact" relay contacts -normally open & normally closed contact provided
Connector:	3 pins on 6-pin terminal strip

Electrical:
Voltage:	+12V DC
Power:	3W

Physical (number of slots):
350FR:	1
7700FR-C:	1
7800FR:	1

▶Ordering Information

7702BPX-IF	2x1 RF Protection Switch for IF Frequencies
7703BPX-IF	2x1 RF Protection Switch for IF Frequencies, with VistaLINK® monitoring
7702BPX-IF-B50	2x1 RF Protection Switch for IF Frequencies, 50Ω BNC connectors
7703BPX-IF-B50	2x1 RF Protection Switch for IF Frequencies, 50Ω BNC connectors, with VistaLINK® monitoring
7702BPX-IF-S50	2x1 RF Protection Switch for IF Frequencies, 50Ω SMA connectors
7703BPX-IF-S50	2x1 RF Protection Switch for IF Frequencies, 50Ω SMA connectors, with VistaLINK® monitoring

Ordering Options — Rear Plate and optional connector type must be specified at time of order Eg: Model +3RU (if 75Ω F-type connector required, order optional +F75)

Rear Plate Suffix
+3RU	3RU Rear Plate for use with 350FR, 7700FR-C or 7800FR Multiframe
+1RU	1RU Rear Plate for use with 7701FR Multiframe
+SA	Standalone Enclosure Rear Plate

Connector Suffix
+F75	75Ω, F-Type Rear Connector

Enclosures
350FR	3RU Portable Multiframe which holds up to 7 single slot modules
7700FR-C	3RU Multiframe which holds up to 15 single slot modules
7800FR	3RU Multiframe which holds up to 15 single slot modules
7701FR	1RU Multiframe which holds up to 3 single or dual slot modules
S7701FR	Standalone Enclosure