2 x 1 RF Protection Switch for IF Frequencies

Model 7702BPX-IF & 7703BPX-IF

The 7702BPX-IF and 7703BPX-IF 2 x 1 RF protection switches for IF frequencies provide automatic changeover functionality to protect against link failure for RF signals from 10MHz to 850MHz. Typical applications include failover protection for 70/140MHz 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.
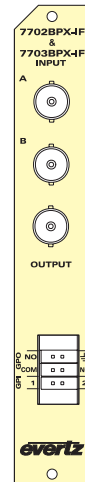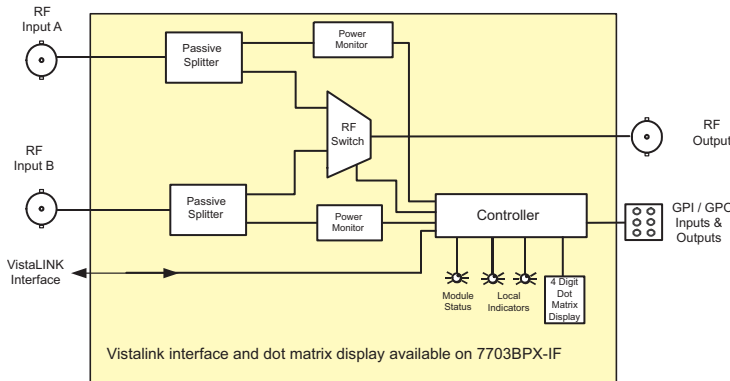
In the application of automatic changeover, the 7702BPX-IF and 7703BPX-IF can be configured to have a MAIN input and a STANDBY input. In this configuration, it will automatically switch to the Standby input when the Main input power is weak or lost. It can be also be configured to have auto or manual switch back to the Main input when the signal is re-established.

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

Features

- 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™ -enabled capability on 7703BPX-IF version

Model 7702 & 7703BPX-IF Block Diagram

Vistalink interface and dot matrix display available on 7703BPX-IF

Specifications

RF Input/Output:

Inputs:	2
Outputs:	1
Connector:	BNC per IEC 60169-8 Amendment 2 (F-type optional)
I/O Impedance:	75Ω
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 +2.5 VDC, High: 3.5 to 10 VDC
+12V Pullup:	Low: -5 to +9.5 VDC, High: 10.5 to 15 VDC
Max Sink Current:	(input shorted to ground) 15 mA
Max Leakage Current for input High:	200 µA

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:	3 Watts

Physical:

Number of Slots:	1

Ordering Information:

7702BPX-IF:	2 x 1 RF Protection Switch for IF Frequencies
7703BPX-IF:	2 x 1 RF Protection Switch for IF Frequencies, 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 7700FR-C Multiframe
+1RU	1RU Rear Plate for use with 7701FR Multiframe
+SA	Standalone Enclosure Rear Plate

Connector Suffix:

+F75	75Ω, F-Type Rear Connector

Enclosures:

7700FR-C	3RU Multiframe which holds 15 modules
7701FR	1RU Multiframe which holds 3 modules
S7701FR	Standalone enclosure

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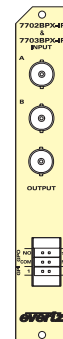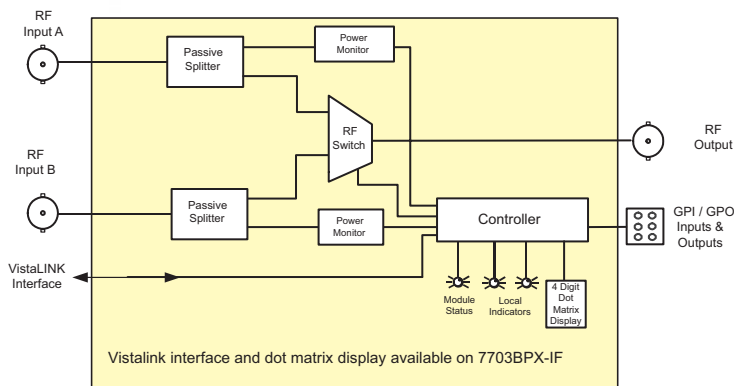
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Features

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- 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®.
- VistaLINK® capability is available when modules are used with the 3RU 7700FR-C frame and a 7700FC VistaLINK® Frame Controller module in slot 1 of the frame.

7702 & 7703BPX-IF Block Diagram & Rear Panel

Specifications

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Inputs:	2
Outputs:	1
Connector:	BNC per IEC 60169-8 Amendment 2 (F-type optional)
I/O Impedance:	75Ω
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)
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Type:	"Dry Contact" relay contacts - normally open & normally closed contact provided
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Physical:

Number of Slots:	1

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7702BPX-IF:	2 x 1 RF Protection Switch for IF Frequencies
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