The 7800R4x2-3G is designed to provide confidence and high availability of any 3G/HD/SD-SDI facility signals.
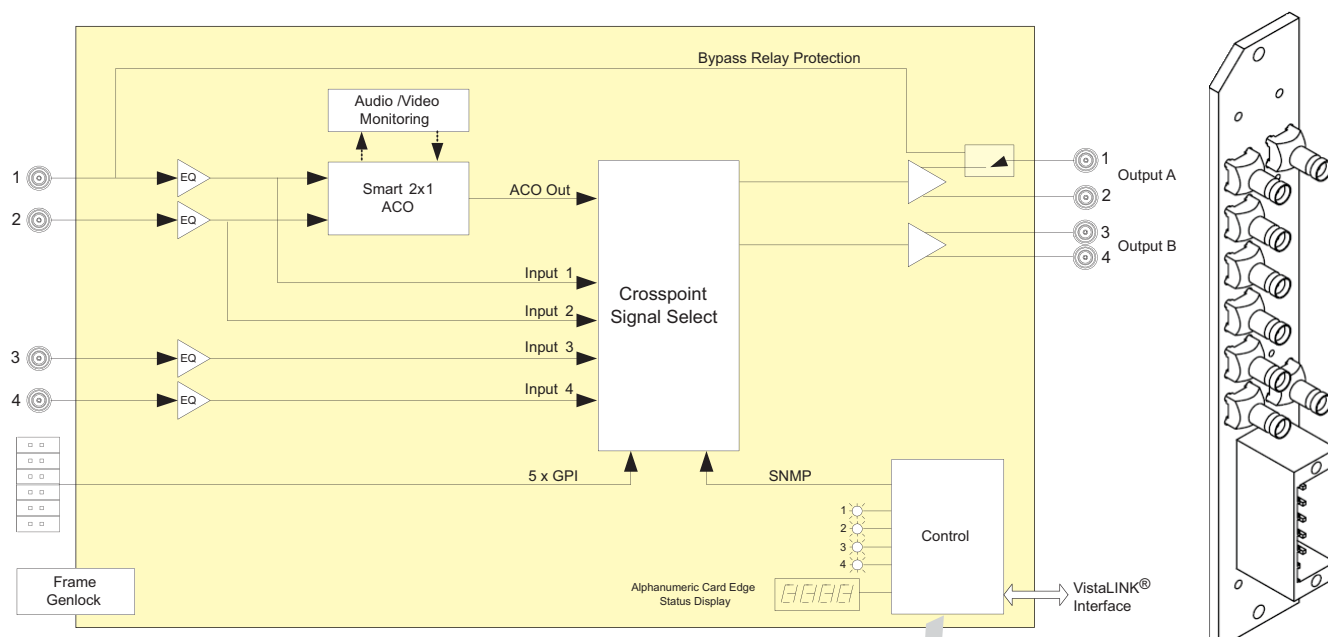
This device:
- **Provides four source inputs and four outputs (2 program and 2 preview)**
- **Provides automatic changeover protection between inputs 1 & 2**
- **Provides additional changeover protection for emergency inputs 3 & 4**
- **Provides real time preview of any input**
- **Provides essential audio and video fault monitoring for changeover criteria**
- **Provides a backup bypass relay protection**
- **Configuration via SNMP frame controller**

Based on award patented audio and video monitoring technology, this device can manually or automatically switch from the primary input to the backup input.

Additionally this device offers two more emergency inputs (3&4) that can be switched to manually via GPI contact closure, network control panel and/or VistaLINK®.

The 7800R4x2-3G is VistaLINK® capable, offering remote monitoring, control and configuration capabilities via Simple Network Management Protocol (SNMP) giving the flexibility to manage operations, including signal monitoring and module configuration from SNMP capable control systems (Manager or NMS).

The 7800R4x2-3G occupies 1 card slot and can be housed in the 3RU 7800FR and 7800FR-QT frames which have a 15 slot capacity

▸Features & Benefits

- Four 3G/HD/SD-SDI inputs (primary, backup and two additional emergency inputs)
- Four outputs (2 program and 2 preview outputs)
- Bypass relay protection between primary input 1 and program output 1
- Automatic smart switch based on essential audio and video monitoring
- Manual override to backup inputs
- Switch control via GPI, network control panel and SNMP
- Real time VistaLINK® monitoring and trending
- High density approach offers 14 modules within 3RU

▸Specifications

Serial Video Inputs:

Number of Inputs:	4 Auto detect
Standard:	SMPTE 259M (525/625)
	SMPTE 292M (1080i/720p)
	SMPTE 424M (1080p)
Connector:	Din 1.0/2.3
Cable Equalization:	Automatic to >300m @270Mb/s
	>150m @1.5 Gb/s
	>100m @3 Gb/s
	Belden 1694A cable (or equivalent)
Return Loss:	>20dB up to 270MHz
	>15dB up to 1.5GHz
	>10dB up to 3GHz

Serial Video Outputs:

Number of Outputs:	4 (2 program and 2 preview)
Standard:	Same as input
Connector:	Din 1.0/2.3
Signal Level:	800mV Nominal
DC Offset:	0V +/- 5V

Rise and Fall Time:	900ps nominal at 270Mb/s
	200ps nominal at 1.5Gb/s
	<135ps at 3Gb/s
Overshoot:	<10% of amplitude
	<0.2UI at 1.5Gb/s
	<0.3UI at 3Gb/s

Genlock:

Type:	Analog 525 or 625, Tri Level HD
Connector:	BNC per IEC 61169-8 Annex A
	(frame reference selectable only)
Impedance:	75Ω termination

General Purpose Inputs:

Number of Inputs:	5
Type:	Opto-isolated, active low
	Internal pull-ups +5V or +12V
Connector:	2x6 Straight Box
	Terminal Strip (included)
Signal Level:	Closure to ground

Electrical:

Voltage:	+12V DC
Power:	16W
EMI/RFI:	Complies with FCC Part 15
	Class A EU EMC Directive

Physical (Number of slots):

7800FR :	1
7800FR-QT :	1

▸Ordering Information

7800R4x2-3G	4x2 3G/HD/SD-SDI Smart Bypass Protection Router (requires 7700FC for configuration)

Ordering Options: Rear plate must be specified at time of order
Eg: 7800R4x2-3G+3RU

Rear Plate Suffix
+3RU   3RU rear plate for use with 7800FR Multiframes

Enclosures

7800FR	3RU multiframe which holds up to 15 single slot modules
7800FR-QT	3RU quiet multiframe which holds up to 15 single slot modules