IRT COMMUNICATIONS

3G · HD · SD · ASI · ✕ · openGear

IRT-6080-DVS

3G/HD/SD-SDI / ASI Digital Video Switcher & Router

FEATURES

- 3G-SDI, HD-SDI, SD-SDI or ASI capable.

- 8x1 or dual 4x1 switching operation.

- 8x2 or 4x2 router setup.

- Automatic muting on loss of inputs.

- Front edge local control with remote control option.

- DashBoard™ software monitoring and control.

GENERAL

The IRT-6080-DVS digital video switcher is part of a family of "smart" switchers in openGear® format that may be configured by the user to cover a wide range of switching and monitoring functions.

On board configuration is possible to allow the IRT-6080-DVS to be used as an 8x1 switcher with 2 common outputs; a dual independent 4x1 switcher; an 8x2 or 4x2 router.

Push-button switches along the front edge provide local control, although control is usually intended via a software interface such as DashBoard™.
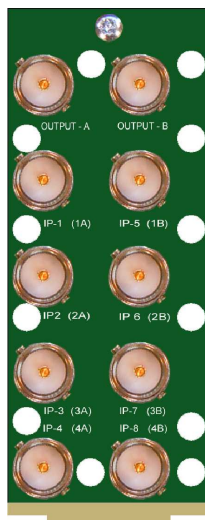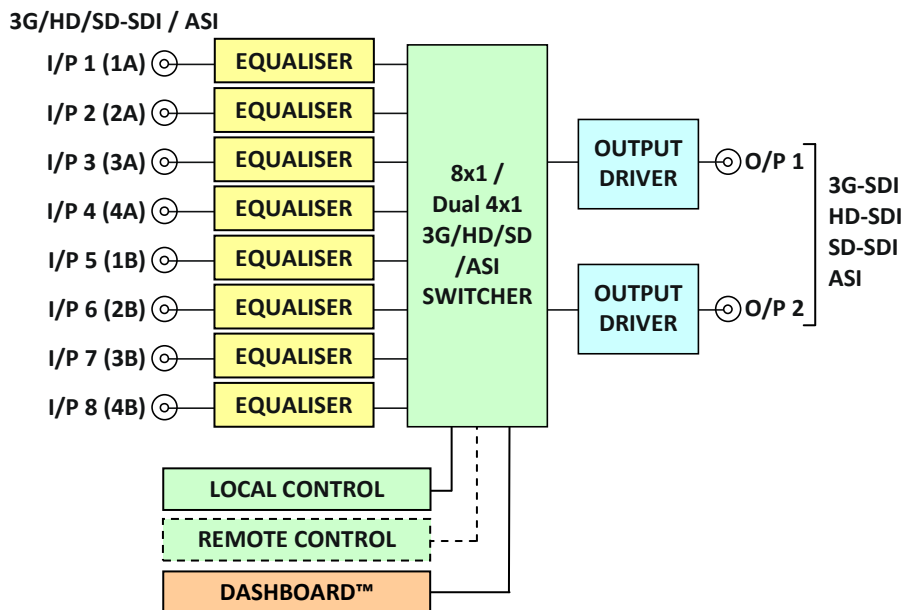
Optionally remote control is via a momentary wire per crosspoint (WPX) control connector allowing interface to a remote control panel or a telemetry system, or alternatively an RS232 remote control is also available providing extended control.

Front edge switches can be disabled for tally indication only so as to prevent accidental switching when intending only to use one of the remote control options.
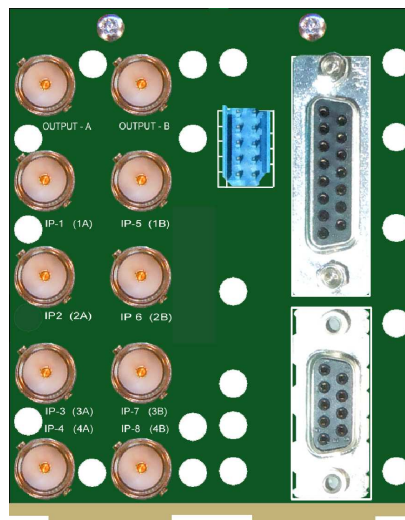
The IRT-6080-DVS is designed to fit the openGear® standard 2RU frames which allow a mixture of cards from various manufacturers to be mounted within the same frame.

The DashBoard™ control software is available as a free download.

BLOCK DIAGRAM IRT-6080-DVS SIGNAL PATH

Standard
Rear Assembly
(IRT-6080-ZVS)

Remote Control
Double Width Rear Assembly
(IRT-6080-ZRC)

TECHNICAL SPECIFICATIONS

Signal inputs:

Number	8.
Type	3G-SDI, HD-SDI, SD-SDI or ASI.
Automatic cable compensation	> 100 m at 2.97 Gb/s (3G-SDI) with Belden 1694A;
	> 100 m at 1.485 Gb/s (HD-SDI) with Belden 1694A;
	> 250 m at 270 Mb/s (SD-SDI/ASI) with Belden 8281.
Impedance	75 Ω.

Signal outputs:

Type	2 x 800 mV ±10% into 75 Ω.

Control:

Type 1	Momentary wire per crosspoint (WPX) grounding contacts (Front edge push button switches or optional remote control panel).
Type 2	openGear® DashBoard™ software.
Type 3	RS-232 (9600bps, 8 data bits, No parity, 1 Stop bit, No flow control) (optional IRT-RC2 remote control panel).

Performance:

Return loss	> 15 dB 5 MHz to 1.5 GHz;
	> 10 dB 1.5 GHz to 2.97 GHz.
DC offset	0 V ±0.5 V.
Output rise and fall time	< 135 ps at 2.97 Gb/s and 1.485 Gb/s;
	0.4 ns and < 1.5 ns at 270 Mb/s.
Intrinsic jitter	< 0.3 UI at 2.97 Gb/s reclocked;
	< 0.2 UI at 1.485 Gb/s reclocked;
	< 0.1 UI at 270 Mb/s reclocked.

Power Requirements:

Voltage	+ 12 Vdc.
Power consumption	< 5VA.

Connectors:

3G/HD/SD-SDI / ASI	BNC.
Control (with remote option)	Plug in 10 pin HE14 dual IDC, DB9 or DB15.

Other:

Temperature range	0 - 50° C ambient.
Mechanical	Suitable for mounting in an openGear® 2RU rack chassis.
Dimensions (openGear® standard)	33.6 mm x 2U x 325 mm;
	(67.3 mm x 2U x 325 mm with remote option rear assembly).
Supplied accessories	Rear connector assembly.
Optional accessories	IRT-RC1 remote control panel with 8 pushbuttons & tally LED's.
	IRT-RC2 RS-232 remote control panel with 2 x 8 (16) pushbuttons & tally LED's.

Ordering		
	IRT-6080-DVS	Standard, programmed with DashBoard™ control.
	IRT-6080-ZRC	Optional double width rear assembly with remote control interfaces.
	IRT-RC1	Remote control panel with 8 pushbuttons & tally LED's.
	IRT-RC2	RS-232 remote control panel with 2 x 8 (16) pushbuttons & tally LED's.
	IRT-RP1	1RU 19" rack mounting plate for IRT-RC1 and IRT-RC2 remote control panels.