ISUxH Series

IF/ L-Band & SHF, Switch Units, rack mounted with user interface.

High Grade Switch Products;

ISUxH0201	2:1, 2in, 1out (or **0102**; 1in, 2out), IF/ L-Band
ISUxH0401	4:1, 4in, 1out (or **0104**; 1in, 4out), IF/ L-Band
ISUxH0801	8:1, 8in, 1out (or **0108**; 1in, 8out), IF/ L-Band
ISUxH1201	12:1, 12in, 1out (or **0112**; 1in, 12out), IF/ L-Band
ISUxH1601	16:1, 16in, 1out (or **0116**; 1in, 16out), IF/ L-Band
ISUxH2401	24:1, 24in, 1out (or **0124**; 1in, 24out), IF/ L-Band
ISUxH3201	32:1, 32in, 1out (or **0132**; 1in, 32out), IF/ L-Band

Note: **x** denotes frequency band (L= IF/L-Band, S= C/X/Ku/DBS-Band, K= Ka-Band).

For other switching configurations & frequency ranges, please contact the factory

For dual, triple & quad channel configurations, please contact the factory

The 19-inch, 1RU rack mounted **ISUxH series** of IF/ L-Band & SHF switching units from Peak Communications are designed to provide high quality signal switching, primarily for satellite earth station signal selection (monitoring) and signal distribution applications. They include latching switches which maintain the RF path configuration in the event of a power failure, rather than pin diode switches which are common in lower grade designs.

The **ISUxH series** units are mains powered and are constructed of high-grade components to give the ultimate isolation performance.

These units are offered with a range of optional enhancements and Peak is happy to customise the units to meet specific needs (please contact the Peak team directly to discuss any non-standard requirements).

Peak Features

- Latching switches to maintain RF path configuration in the event of power failure
- High isolation
- Compact; up to 16:1 (16 inputs, 1 output) or 1:16 (1 input, 16 outputs) in a single 1RU chassis
- Optional monitoring, dual PSU's, Ethernet remote control etc.
- Customising available

ISUxH series – Typical Specification

Switch Performance

Switch type	Co-axial, latching
Option 13;	Co-axial, failsafe
Ways	up to 16-way (16:1 or 1:16) available in 1RU 24-way (24:1 or 1:24) available in 2RU 32-way (32:1 or 1:32) available in 3RU
Frequency	
IF/L (ISULH series);	9kHz to 3GHz
SHF (ISUSH series);	up to 18.4GHz
Ka (ISUKH series);	up to 31GHz available, please contact factory

Note: For performance degradation above 3GHz please contact the factory

Insertion loss	1dB ±1dB nom
Gain flatness	±0.75dB across full band (up to ±1.5dB for 32:1) ±0.25dB across any 40MHz
Input power	+50dBm max.
Isolation	80dB typ. (between any two input ports)
Input return loss	15dB
Output return loss	15dB

RF Interfaces

Input connections	SMA (f), 50Ω (K-Type above 18.4GHz)
Option 1a;	BNC (f), 50Ω
Option 1b;	N-Type (f), 50Ω (up to 8-way only in 1RU)
Option 1c;	BNC (f), 75Ω
Output connections	SMA (f), 50Ω (K-Type above 18.4GHz)
Option 1d;	BNC (f), 50Ω
Option 1e;	N-Type (f), 50Ω (up to 8-way only)
Option 1f;	BNC (f), 75Ω

DC Blocking (Option 8)

Provides DC blocking facility for switch inputs or outputs

Output 'Monitor' (Option 2a, 2b)

Connected directly to front panel (Option 2a) or rear panel (Option 2b) to provide an appropriately terminated monitor port.

Level	-20dBc ±3dB

Note: Connection type, impedance and level offered will be identical to the main rear panel interfaces, unless otherwise requested.

Electronically Variable Attenuation (Option 10)

Attenuation range	30dB
Step size	0.1dB or 0.5dB
Control	Electronically variable via local front panel & remote control

Notes: Attenuator typically fitted to common output. Input power, noise figure & flatness degraded with this option, please contact factory for details.

Failsafe Switching (Option 13)

Failsafe switching to default back to primary RF path in the event of a power failure.

Terminating switching (Option 14)

As standard the unselected inputs/ outputs are unterminated, this option provides termination for all unselected interfaces.

Mechanical

Width	19", standard rack mount
Height	Typically up to 16-way in 1U (1.75"), up to 24-way in 2RU (3.5"), up to 32-way in 3RU (5.25")
Depth	400mm, plus connectors
Construction	Aluminium chassis
Weight	Approx. 2kgs (4.4lbs)

Environmental

Operating temp	-10^{0}C to +50^{0}C
EMC	EN55022-part B & EN50082-1
Safety	EN60950

Power supply

Voltage	90-264VAC
Frequency	47-63Hz
Power	30 Watts max.
Option 7;	Redundant PSU; provides a 1+1 redundant power supply configuration with separate prime power inputs

Control System Interface

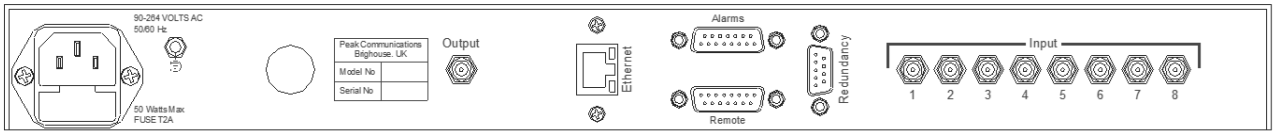
Remote Control	RS232/RS485 port
Option 9;	Ethernet; embedded web server & SNMP network management support
Discrete 'alarms interface'	PSU failure Switch position error

Options

1a)	Input's BNC (f), 50Ω connections
1b)	Input's N-Type (f), 50Ω connections (8:1/ 1:8 max. in 1RU)
1c)	Input's BNC (f), 75Ω connections
1d)	Output's BNC (f), 50Ω connections
1e)	Output's N-Type (f), 50Ω connections
1f)	Output's BNC (f), 75Ω connections
2a)	Output front panel monitor port
2b)	Output rear panel monitor port
5)	Spare port terminations
7)	Redundant power supplies
8)	DC blocking for combiner inputs or splitter outputs
9)	Ethernet interface with embedded web server & SNMP
10a)	Electronic attenuator, 0-30dB (0.5dB steps), at IF/ L-Band
10b)	Electronic attenuator, 0-30dB (0.1dB steps), at IF/ L-Band
13)	Failsafe switches, defaulting back to primary RF path during power failure
14)	Termination of unselected interfaces.

Note: The addition of options can modify the typical specification, for details please consult the factory

Rear Panel View (8:1 selection switch unit shown)



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