

ISLH & ICLH Series

L-Band, Active & Passive Splitter/ Combiner Units, Rack Mounted with user interface.



High Grade Splitter Products;

ISLH04A/P	Active or passive, 4-way
ISLH08A/P	Active or passive, 8-way
ISLH12P	Passive, 12-way
ISLH16P	Passive, 16-way

High Grade Combiner Products;

ICLH04P	Passive, 4-way
ICLH08P	Passive, 8-way
ICLH12P	Passive, 12-way
ICLH16P	Passive, 16-way

High Grade Splitter & Combiner Products;

ISCLH04P	Passive, 4-way splitter and 4-way combiner in a single chassis
ISCLH08P	Passive, 8-way splitter and 8-way combiner in a single chassis

For splitting/ combining at other frequencies, please contact the factory.

For equivalent units with basic user interface, please see ISL & ICL series datasheets.







For equivalent remote mount units, please contact the factory.

The 19 inch, 1U rack mounted **ISLH series** of L-Band Splitter units and **ICLH series** of L-Band Combiner units from Peak Communications are designed to provide high quality signal splitting/ combining, primarily for satellite Earth station applications.

The **ISLH/ ICLH series** units are mains powered and are constructed of high grade components to give the ultimate gain flatness, noise figure and return loss performance. Both active and passive versions are available, with optional internal amplifier redundancy for active versions.

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

Peak Features

-  High gain flatness and low Noise Figure
-  Compact with up to 16-way in a single 1RU chassis
-  Amplifier low current alarm monitoring
-  Electronically Variable Attenuator options for both local & remote control of Gain
-  Optional monitoring, dual PSU's, redundant amplifiers, BUC/ LNB power, referencing etc
-  Customising available

ISLH, ICLH series – Typical Specification

Active RF Splitter Performance (ISLHxxA)

Ways (xx)	04, 08-way
<i>Notes: spare ports will require termination (see option 5). For increased number of ways (up to 16-way) please consult the factory for performance.</i>	
Frequency	850-2150MHz
Gain	0dB \pm 1dB nom.
Gain Flatness	\pm 0.75dB across full band \pm 0.25dB across any 40MHz
TOIP	+12dBm
1dB Input GCP	+1.5dBm
<i>Note: for higher GCP options please contact the factory</i>	
Noise Figure	6dB
Isolation	25dB typ. (between any two output ports)
Input Return Loss	14dB
Output Return Loss	20dB

Passive RF Splitter/ Combiner Performance (IS/CLHxxP)

Ways (xx)	04, 08, 12 & 16-way available
Frequency	850-2150MHz
Insertion Loss	8 to 14dB \pm 1dB nom. (dependent upon number of ways)
Gain Flatness	\pm 0.25dB across full band \pm 0.1dB across any 40MHz
RF Input power	0dBm max
Isolation	25dB typ. (between any two output ports)
Input Return Loss	14dB
Output Return Loss	20dB

RF Interfaces

Connection	SMA (f), 50 Ω
Option 1a	BNC (f), 50 Ω
Option 1b	N-Type (f), 50 Ω (up to 8-way only)
Option 1c	BNC (f), 75 Ω (up to 8-way only)

Splitter (Input)/ Combiner (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 \pm 3dB
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Note: connection type and impedance offered will be identical to the main rear panel interfaces, unless otherwise requested.

Splitter Output 'Monitor' (Option 2c)

One splitter output connected directly to front panel to provide an appropriately terminated monitor port.

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

BUC/ BDC/ LNB Powering (Option 3a)

Provides power to BUC via L-Band output of Combiner (Tx systems) or to BDC/ LNB via input of Splitter (Rx systems).

Voltage	+17 to +24VDC (factory settable)
Current	500mA typical

Note: for other power connection, power or level configurations, please consult the factory. This option degrades gain flatness across the full band performance by approximately \pm 0.25dB.

BUC/ BDC/ LNB external referencing (Option 3b)

Provides external reference pass-through to BUC via output of Combiner (Tx systems) or to BDC/ LNB via input of Splitter (Rx systems).

External reference input;

Frequency	10MHz (5MHz factory settable)
Level	0dBm \pm 3dB nom
Connector	BNC (f), 50 Ω

Note: for other external reference connections, level configurations or for internal automatic 'back-up' reference generation, please consult the factory.

Redundant Amplifiers (Option 4)

Provides internal 1+1 redundancy for 'active' splitter/ combiner amplifiers

Electronically Variable Attenuation (Option 10)

Attenuation range	30dB
Step size	0.1dB or 1dB
Control	Electronically variable via local (front panel) & remote control

Note: attenuator typically fitted to common input (splitter) or output (combiner).

Mechanical

Width	19", standard rack mount
Height	1U (1.75")
Depth	200 to 400mm (option dependent), plus connectors
Construction	Aluminium chassis
Weight	Approx. 2kgs (4.4lbs)

Environmental

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

Power supply

Voltage	90-264VAC
Frequency	47-63Hz
Power	30 Watts max.
Redundancy (Option 7)	Provides a 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
Redundancy	CANBUS [®] interface for N+1 system In-built 1+1 & 2+1 controller
Discrete 'alarms interface'	PSU fail Amplifier current detection

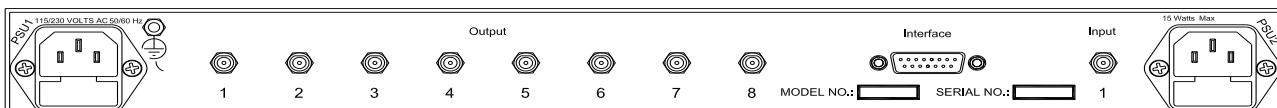
Options

- 1a) BNC (f), 50 Ω connections
- 1b) N-Type (f), 50 Ω connections (8-way max)
- 1c) BNC (f), 75 Ω connections (8-way max)
- 2a) Splitter (input)/ Combiner (output) front panel monitor port
- 2b) Splitter (input)/ Combiner (output) rear panel monitor port
- 2c) Splitter output front panel monitor port
- 3a) BUC/ BDC/ LNB powering
- 3b) BUC/ BDC/ LNB external referencing
- 4) Redundant amplifiers (active versions only)
- 5) Spare port terminations.
- 7) Redundant power supplies
- 9) Ethernet interface with embedded web server & SNMP
- 10a) Electronic Attenuator, 0-30dB (1dB steps), at L-Band
- 10b) Electronic Attenuator, 0-30dB (0.1dB steps), at L-Band

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



Rear Panel View



Peak Communications reserves the right to alter the specifications of this equipment without prior notice. ISLH,ICLH-301111.

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