

RCUH100 series

1 for 1 Redundancy Switch Units with full User Interface and Remote Control.



RCUH100 for use with;

L500 series Block DownConverters

IBU/ IBD/ IBUH/ IBDH series Block Converters

RCUH100(Ka) for use with;

IBU(Ka)/ IBD(Ka)/ IBUH(Ka)/ IBDH(Ka) series Block Converters

RCUH101 for use with;

F1201/ F1202 Fixed Frequency L-Band Converters

RCUH102 for use with;







F1200 Fixed frequency L-Band Up & DownConverter

The **RCUH100 series** 1+1 Redundancy switch units are designed to provide redundancy for single-feed systems, maintaining maximum availability whilst allowing routine maintenance and repair work to be carried out on the standby converter without the normally associated down-time.

The **RCUH100 series** maintains one converter on-line whilst the other is held in hot standby, allowing the user to select the on-line converter. The redundancy unit can be controlled from the front panel user interface (Local mode) or remotely via the RS232/ 485 or optional Ethernet link to a host computer (Remote mode). In remote mode, the on-line converter can be selected and monitored whilst keeping switch-over automatic in case of failure.

In AUTO mode, the unit monitors the converter alarm signals via the interface connecting cables and if a fault condition develops within the on-line converter, the **RCUH100 series** automatically switches traffic to the standby unit.

Peak Features

-  Standard 5MHz to 18GHz operation
-  Dual mains input & redundant power supplies fitted as standard
-  Full user interface and Remote control fitted as standard
-  Dual switching arrangement (L-Band and RF) minimises insertion loss
-  Peak Converter alarm interface cables provided as standard
-  Optional, high quality matched cable sets to interface to the Peak converter range



RCUH100 series - Typical Specification

The following gives the performance of the RCUH units in isolation;

L-Band & RF Interfaces

Frequency	5MHz to 18GHz
Ka-band	to 31GHz
Connections	50Ω, SMA (f)
Option 6a;	50Ω, N-Type (f) 'system input' connection
Option 6b;	50Ω, N-Type (f) 'system output' connection)
Ka-Band	50Ω, K-Type (f) or 2.92mm (f)

Switch Element Parameters

Switching speed	<15ms
Type	Co-axial, latching
Main path	2 off
Standby path	2 off

Frequency Dependent Parameters		Single Switch Insertion Loss (maximum)	Switch Return Loss (typical)	Switch Isolation (typical)
L-Band Section	L-band	0.15dB	23dB	80dB
RF Section	S-band	0.15dB	23dB	80dB
	C-band	0.2dB	21dB	70dB
	X-band	0.3dB	18dB	65dB
	Ku-band	0.35dB	16dB	60dB
	DBS-band	0.4dB	15dB	60dB
	Ka-band	0.75dB	13dB	50dB

Typical System Performance

The following gives the typical performance that can be expected from a system comprising Peak Converters & using the high quality matched IF, L-Band & RF cable set (option 1);

Gain Flatness	±1dB full band (C-band, with IBU/IBUH600 converters)
Insertion loss	3dB (not including converter gain)
Switching speed	<150ms (from fault to switch completion)

RCUH100 Unit General

Mechanical

Width	19", standard rack mount
Height	1U (1.75")
Depth	420mm (16.5"), plus connectors
Weight	4.0kgs (8.8 lbs)
Construction	Aluminium chassis

Environmental

Operating temp.	0 to +50°C
EMC	EN 55022 part B & EN 50082-1
Safety	EN 60950



Power Supply (dual, redundant)

Connection	IEC (dual feed cables provided)
Voltage	115/230VAC ±10%, switch selectable
Frequency	50/60Hz
Power	50 Watts max.

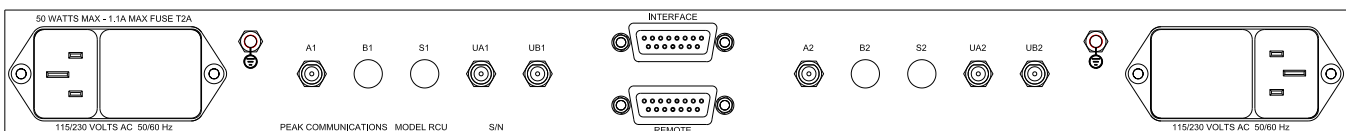
Control System

Remote control	RS232/ 485 port
Option 9 ;	Ethernet; Embedded web server & SNMP network management support.
Converter alarms	PSU fail, LO lock fail & Amplifier fail.
Connector	15-way, D-type.

Options

- 1a) High quality, matched L-Band & RF (C, X or Ku-Band) cables to interface to the IBU/ IBD/ IBUH/ IBDH/ L500 series converter products, when mounted adjacent to the RCUH100 unit.
- 1b) As option 1a above but includes DBS-Band SHF cables.
- 1c) As option 1a above but includes Ka-Band SHF cables.
- 1d) High quality, matched IF & L-Band cables to interface to the F1201/ F1202 converter products, when mounted adjacent to the RCUH101 unit.
- 1e) High quality, matched IF & L-Band cables to interface to the F1200 converter product, when mounted adjacent to the RCUH102 unit.
- 2) Custom front panel overlay.
- 6a) N-Type (f), 50Ohm 'system input' interface.
- 6b) N-Type (f), 50Ohm 'system output' interface.
- 9) Ethernet interface with embedded web server & SNMP

Rear Panel



Peak Communications reserves the right to alter the specifications of this equipment without prior notice. RCUH100series-180511.

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