

## RCUH200 series

1 for 2 Redundancy Switch Unit with full User Interface and Remote Control



**RCUH200** for use with;

**L500 series** Block DownConverters  
**IBU/ IBD/ IBUH/ IBDH series** Block Converters

**RCUH200(Ka)** for use with;

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

**RCUH201** for use with;

**F1201/ F1202** Fixed Frequency L-Band Converters

**RCUH202** for use with;

**F1200** Fixed frequency L-Band Up & DownConverter

**RCUH203** for use with;

**ILA/ ILAH series** Line Amplifiers

**RCUH204** for use with;

**P7xxx series** Agile/ synthesised frequency converters

**RCUH205** for use with;

**P7000 series** Agile/ synthesised frequency combined L-Band Up & DownConverters







The **RCUH200 series** 2+1 redundancy switch units are designed to provide redundancy for dual-feed systems, maintaining maximum availability whilst allowing routine maintenance and repair work to be carried out on the standby unit without the normally associated down-time.

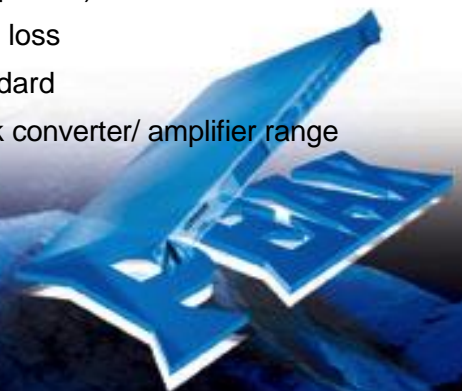
The **RCUH200 series** maintains two converters/ amplifiers on-line whilst the other is held in hot standby, allowing the user to select the on-line unit in either chain. The redundancy unit can be controlled from the front panel user interface (local mode) or remotely via the RS232/485 or optional Ethernet link to a host computer (remote mode). In remote mode, the on-line unit can be selected and monitored whilst keeping switch-over automatic in case of failure.

In AUTO mode, the unit monitors the converter/ amplifier alarm signals via the interface connecting cables and if a fault condition develops within either of the on-line units, the **RCUH200 series** automatically switches traffic to the standby unit.

Factory alignment for the complete 2+1 system including Peak supplied high quality cables is recommended for this product to optimise gain flatness and other parameters. If bought as a complete set of equipment, factory alignment is automatically undertaken.

### Peak Features

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



## RCUH200 series - Typical Specification

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

### IF, L-Band & RF Interfaces

Frequency	5MHz to 18GHz
Ka-band	to 31GHz
Connections	50Ω, SMA (f)
Option 6a;	50Ω, N-Type (f) 'system input'
Option 6b;	50Ω, N-Type (f) 'system output'
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	4 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 factory aligned 2+1 system comprising Peak converters & using the high quality matched IF, L-Band & RF cable set (option 1);

Gain flatness	±0.5dB full band, ±0.25dB across any 40MHz in-band (C-band, with IBU600/ IBUH600 converters)
Insertion loss	4dB (not including converter gain)
Switching speed	<150ms (from fault to switch completion)

### RCUH200 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	90-264VAC
Frequency	47-63Hz
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) & control cables to interface to the IBU/ IBD/ IBUH/ IBDH/ L500 series converter products, when mounted adjacent to the RCUH200 unit
- 1b) See option 1a above but includes DBS-Band SHF cables
- 1c) See option 1a above but includes Ka-Band SHF cables
- 1d) Cable set for F1201/ F1202 & RCUH201 unit
- 1e) Cable set for F1200 & RCUH202 unit
- 1f) Cable set for ILA & RCUH203 unit
- 1g) Cable set for P7xxx series & RCUH204 unit
- 1h) Cable set for P7000 & RCUH205 unit
- 2) Custom front panel overlay
- 6a) N-Type (f), 50Ohm 'system input' interfaces
- 6b) N-Type (f), 50Ohm 'system output' interfaces
- 9) Ethernet interface with embedded web server & SNMP

### Rear Panel

