

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
- 13) Transfer switching for off-line unit monitoring /test

Notes; the addition of options can modify the typical specification, for details please consult the factory

Rear Panel

