

## RCU50R Series

### 1+1, 2+1 Remote Mounted Redundancy Control for BUC/BDC/LNB's



**RCU50R** for 1+1 control  
**RCU52R** for 2+1 control

The **RCU50R** 1+1 & **RCU52R** 2+1 remote mounted units provide a fully outdoor BUC, BDC or LNB redundancy switching control solution, which minimises cross-site control and drive cables, costs and complexity whilst improving antenna isolation.

The units are designed to drive and monitor remote mounted BUC's, BDC's & LNB's. A range of 10MHz reference signal generation, locking and pass through options as well as DC supply can also be provided to drive the BUC, BDC & LNB units.

For LNB's, waveguide switch drive and monitoring is provided along with optional external L-band coaxial switches (for non-ganged WGS applications). For BUC's & BDC's, external SHF co-axial switch units can be provided.

The **RCU50R, 52R** units are designed for remote control via Ethernet, but are also offered with basic local controls. Remote control includes an embedded web-browser with SNMP network management support. In remote mode, the on-line unit can be selected and monitored whilst keeping switch-over automatic in case of failure.








Peak can offer dedicated indoor rack mounted user interface units (Ethernet based), see **FPC100**.

In AUTO mode, the unit monitors the alarm signals or DC current (with user settable alarm levels) and if a fault condition develops within the on-line unit, traffic is automatically switched to the standby unit.

The flexibility of the design allows for customization, so please consult the factory if the features that you require are not shown on this data sheet.

Peak can supply external switches and cabling, for more details please consult the factory.

### Peak Features

-  External waveguide or co-axial switch control
-  Comprehensive remote control, plus local manual controls and indicators
-  Minimises capex through reduced cross-site control and drive cable costs
-  Improves electromagnetic antenna isolation
-  DC drive with current sensing and user settable alarm levels
-  Compatible with most makes of LNB
-  Optional reference generation, external reference locking or 'pass-through'



## RCU50R, 52R Units – Typical Specification

### External waveguide switch interface

Peak can supply waveguide switches (please consult factory for details)

Connection	Circular multi-pole, weatherproof (mating part supplied)	
Drive Voltage	Code 2;	+12VDC
	Code 4;	+24VDC
	<i>Note; other voltage options available, please consult the factory.</i>	
Drive type	Pulsed, latching with indicators	
	Code P;	Positive pulse
	Code N;	Negative pulse (may not require tell-backs)

### L-Band switching

Type	Code G;	Ganged with waveguide switch
	Code 2;	External +12V
	Code 4;	External +24V
	Code I;	Internal, single or dual (for dual-range devices)
Connection (for internal)	N-Type(f), 50Ohm	

### Primary unit interface (BUC/ BDC/ LNB)

Many types of primary units are supported, for assistance with ordering please contact factory stating primary unit type & required configuration

	Code U;	BUC
	Code D;	BDC
	Code L;	LNB
Type	Code S;	Single range
	Code V;	Switched range (multi-voltage switched)
	Code D;	Dual range
Voltage	Factory settable, regulated	
	Code 2;	+12VDC
	Code 8;	+18VDC
	<i>Note; other voltage options available, please consult the factory.</i>	
	Code X;	Switched range (please state voltage requirements)
Unit current	Please state maximum current (in mA) on order code	
Connection	Circular multi-pole, weatherproof (mating part supplied)	
External unit alarms	To indicate fault and trigger automatic switch-over	
	Code D;	External dry contact closure
	Code N;	None, in which case current monitoring with user settable alarm levels will be provided

### Reference generation

Type	Internal, fed via a separate discrete TNC(f), 50Ohm connection, or via L-Band (primary unit & option dependant)	
	Code 1;	10MHz at 0dBm nominal
	Code 5;	50MHz at 0dBm nominal
	Code N;	No internal reference generator
Stability	<5 x 10 <sup>-10</sup> over 1s, <5 x 10 <sup>-9</sup> per day	
Ageing	<5 x 10 <sup>-7</sup> per year	
Temp stability	<5 x 10 <sup>-8</sup> over 0 to 50°C	
External ref. input	With automatic detection & locking facility	
	Code P;	10MHz at 0dBm nom., via TNC (f), 50Ω
	Code N;	not required

### Mechanical

Dimensions	290 x 230 x 95mm (11.4 x 9.1 x 3.7inch)
Construction	Die-cast Aluminium, weatherproof, IP66 rated
Weight	Approx. 4kgs (9lbs)

### Environmental

Operating temp	-10°C to +50°C (less solar gain)
Option 12;	-40°C to +50°C (less solar gain)
Humidity	0-100% condensing
EMC	EN55022 part B & EN50082-1
Safety	EN60950

### Power Supply (dual input)

Voltage	+24 to +27VDC
Power	20 Watts nom (option dependent)
Connection	Multi-pin circular, weatherproof (mating part supplied)

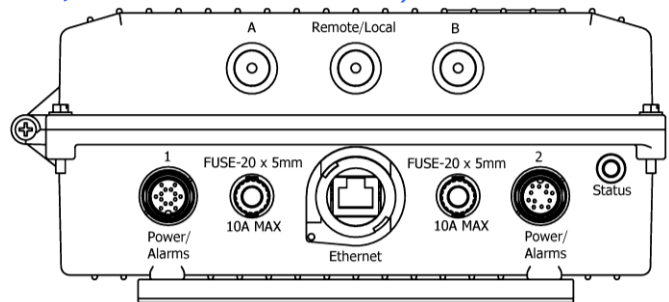
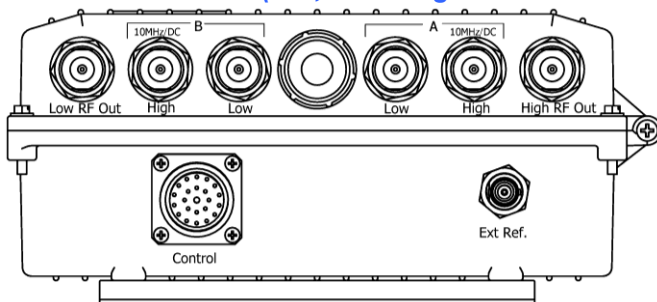
### Control System

Alarms	LED indicator & summary failure relay (form C)
Connection	See power supply section
Local control	Weatherproof switches with indicators for local /remote and source selection
Remote control	Ethernet; embedded web server & SNMP network management support
Connection	RJ45, weatherproof

### Options

- 1) Cable assembly (between RCU, primary units and waveguide switch)
- 12) Low temperature operation to -40°C

## Connection Panels (1+1, dual range LNB controller shown, with reference & DC drive)



## Ordering Code (for help or clarifications please contact the factory)

