

## OSB Series

### Remote Mounted Distribution & Selection Switches







- OSB21L**      2:1 selection switch, L-Band
  - OSB21S**      2:1 selection switch, SHF (C/X/Ku/DBS-Band)
  - OSB21Ka**     2:1 selection switch, Ka-Band
- [Equivalent rack mount units are available, please contact the factory.](#)

The **OSB series** remote mounted distribution and selection switch units from Peak Communications are designed to provide high quality signal switching, primarily for professional satellite earth station monitoring, distribution and general signal routing applications.

The **OSB series** units can be remotely controlled via Ethernet with embedded web server & SNMP network management support. Optional local manual controls can also be provided.

[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 Features

-  Optional latching switches to maintain RF path configuration in the event of power failure
-  High isolation
-  Ethernet based remote control fitted as standard
-  Rugged weatherproof housing



## OSB series – Typical Specification

### Switch Performance

Switch type	Co-axial SPDT
Option 13;	Co-axial Transfer (latching)
Ways (x:x)	2:1, 1:2
Frequency	
OSB21L;	IF/L-Band; 9kHz to 3GHz
OSB21S;	C, X, Ku & DBS-Band; 3 to 18.4GHz
OSB21Ka;	Ka-Band; up to 31GHz
<i>Note; for performance at Ka-Band, please contact the factory</i>	
Insertion loss	1dB ±1dB nom
Gain flatness	±0.75dB across full band ±0.25dB across any 40MHz
Input power	+50dBm max.
Isolation	80dB typ. (between any two input ports)
Input return loss	15dB
Output return loss	15dB

### RF Interfaces

Input connections	N-Type (f), 50Ω (K-Type above 20GHz)
Output connections	N-Type (f), 50Ω (K-Type above 20GHz)

### Output 'Monitor' (Option 2)

Provides an appropriately terminated monitor port

Level	-20dBc ±3dB
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*Note; connection type, impedance and level offered will be identical to the main interfaces, unless otherwise requested.*

### DC Blocking (Option 8)

Provides DC blocking facility for switch inputs or outputs

### Electronically Variable Attenuation (Option 10)

Attenuation range	30dB
Step size	0.1dB or 0.5dB
Control	Electronically variable via local front panel & remote control

*Note; attenuator typically fitted to common connection. Input power, noise figure & flatness degraded with this option, please contact factory for details.*

### Transfer Switch (Option 13)

Latching transfer switches to maintain the RF path configuration in the event of a power failure.

### Mechanical

Dimensions	290 x 230 x 95mm (11.4 x 9.1 x 3.7inch)
Construction	Die-cast Aluminium, weatherproof, IP66 rated
Weight	Approx. 1.4kgs (3lbs)

### Environmental

Operating temp	-25°C to +55°C (less solar gain)
Option 12;	-40°C to +55°C (less solar gain), with extended warm-up time for cold start operation & higher current
Humidity	0-100% condensing
EMC	EN 55022 part B & EN 50082-1
Safety	EN 60950

### Power Supply

Voltage	+16.5 to +35VDC
Current	500mA max
Connection	Multi-pin circular, weatherproof (mating part supplied)

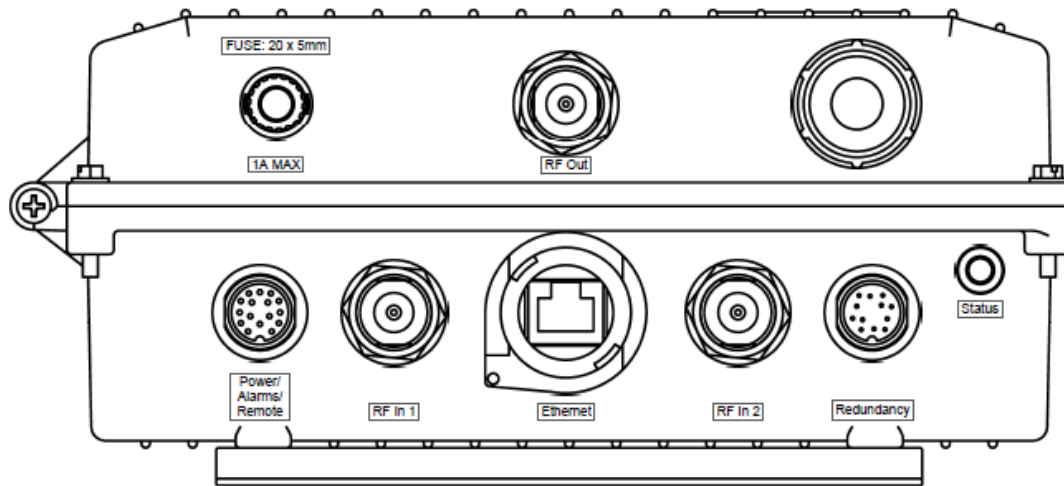
### Control System Interface

M&C	Summary failure relay (form C)
Option 7;	Source selection 'toggle' switch mounted on chassis with LED indication. Includes local interface for source selection via external switch
Remote Control	Ethernet; embedded web server & SNMP network management support
Connection	Multi-pin circular, weatherproof (mating part supplied)

### Options

- 2) Output monitor port
  - 5) Spare port terminations
  - 7) Toggle switch for local manual source selection
  - 8) DC blocking for switch inputs or outputs
  - 10a) Electronic attenuator, 0-30dB (0.5dB steps), at IF/ L-Band
  - 10b) Electronic attenuator, 0-30dB (0.1dB steps), at IF/ L-Band
  - 12) Low temperature operation to -40deg.C
  - 13) Transfer (latching) switches to maintain RF path during power failure
- Note; the addition of options can modify the typical specification, for details please consult the factory*

## Connector panel view



Peak Communications reserves the right to alter the specifications of this equipment without prior notice. OSBseries-110517.

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