

OSB Series

Remote Mounted Distribution & Selection Switches



OSBxxL L-Band switches
OSBxxS SHF (C/X/Ku/DBS-Band) switches
OSBxxKa Ka-Band switches

Equivalent rack mount units are available, please contact the factory.

The **OSB series** remote mounted distribution and source 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. Also suitable for;

Antenna selection purposes as typically required on superyachts.

UHF/ VHF antenna selection.

The **OSB series** units can accommodate up to 8-way switching and 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



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



Up to 8-way, in distribution or selection configurations



High isolation



Ethernet based remote control fitted as standard, optional basic local controls



Rugged weatherproof housing



OSB series – Typical Specification

Switch Performance

Switch type	Co-axial, latching
Option 13;	Co-axial, failsafe
Ways (x:x)	2:1, 1:2, 4:1, 1:4, 6:1, 1:6, 8:1, 1:8
Frequency	OSBxxL; IF/L-Band; 9kHz to 3GHz
	OSBxxS; C, X, Ku & DBS-Band; 3 to 18.4GHz
	OSBxxKa; Ka-Band; up to 31GHz
<i>Note: for performance at Ka-Band, please contact the factory</i>	
Insertion loss	1dB $\pm$ 1dB nom
Gain flatness	$\pm$ 0.75dB across full band
	$\pm$ 0.25dB across any 40MHz
	+50dBm max.
Input power	80dB typ. (between any two input ports)
Isolation	15dB
Input return loss	15dB
Output return loss	15dB

RF Interfaces

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

Input/ Output 'Monitor' (Option 2)

Provides an appropriately terminated monitor port on the common input (distribution switches), or common output (source selection switches)

Level -20dBc $\pm$ 3dB

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.

Failsafe Switching (Option 13)

Failsafe switching to default back to primary RF path 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	+27 to +36VDC
Current	500mA max
Connection	Multi-pin circular, weatherproof (mating part supplied)

Control System Interface

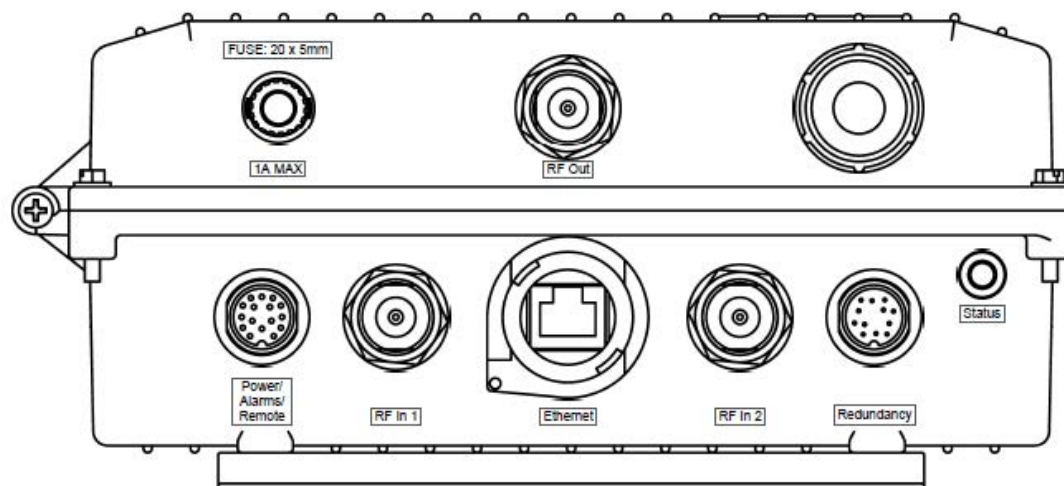
M&C	Summary failure relay (form C)
Option 7;	Manual local switch control, mounted on chassis with LED indication.
Remote control	Ethernet; embedded web server & SNMP network management support
Connection	Multi-pin circular, weatherproof (mating part supplied)

Options

- 2) Output monitor port
- 5) Spare port terminations
- 7) Manual local switch control
- 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) Failsafe switches, defaulting back to primary RF path during power failure
- 16) Factory pre-set IP address

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

Connector panel view (sample)



ESATCOM INC.

3628 Francis Lewis Blvd.

Flushing, NY 11358

www.esatcom.com

Tel: 718.799.0084

Email: sales@esatcom.com