

Satellite Communication Line Amplifiers

Bench Instrument

- L, C, X, Ku, DBS, Ka Bands
- Multi-Bands
- Driver, Cross Site and Laboratory Instruments
- Flat Response
- Portable
- Custom Options



General Specifications (also see options)	
Impedance	50 ohms
Maximum Input Level	+20 dBm
Gain Flatness	+/-0.5 dB typ. in any 500MHz
Third Order Intercept	+30 dBm typ.
Saturation Output Power	2 dB typ. above 1dB GCP
Internally Generated Spurious	-70 dBc typ.
Operating Temperature Range	-10+50C
Noise Figure Specification	@ +25C
Input & Output Connectors	Front panel (see table)
Option 01 RF Monitor Connector	Front panel (see table)
Option 12 Detector Output	Front panel, BNC female
Optional Attenuator Control	10 turn knob with dial
A.C. Input Power	80-240V, 50-60Hz
Input Power Connector	IEC with fuse, rear panel
Power On/Off with Indicator	Front panel
Size	260 x 110 x 360mm including connectors & protrusions

The BSL series of Satellite Communication Line Amplifiers are designed to compensate for losses in microwave and RF signal paths, either between system components and across site or as a driver for high power transmission amplifiers. The amplifiers operate in specific C, X, Ku, DBS and Ka uplink or downlink frequencies and some multi-band models provide the versatility of covering both up and down link frequencies. Alternatively, some models cover more than one link frequency regime.

Options:

- 00 - Standard
- 01 - 30 dB Output Coupler with RF Monitor Port
- 02 - Two Outputs @ +20 dBm each
- 03 - Three Outputs @ +20 dBm each
- 04 - Four Outputs @ +20 dBm each
- 21 - 30 dB Variable Input Attenuator
- 22 - 30 dB Variable Output Attenuator
- 23 - Output Monitor Detector
- 24 - 30 dB Gain (min)
- 25 - 40 dB Gain (min)
- 26 - +23 dBm output @ 1dB GCP (min)
- 27 - Input Isolator (1.25:1 VSWR, subject to bandwidth)
- 28 - Output Isolator (1.25:1 VSWR, subject to bandwidth)
- 31 - Type N Female Input Connector (18 GHz max)
- 32 - Type N Female Output Connector (18 GHz max)
- 33 - Type N Female RF Monitor Connector (18 GHz max)

Custom Options:

- Custom Frequency Range
- Custom Gain Profile
- Cable Loss Gain Equalisation
- TWT Slope Gain Equalisation
- Filtered Output
- Higher Output Power to 10 watts (not 1U rack)
- Switched Channel Outputs
- Remote Gain Control
- Multiple Inputs
- 19" Rack Units
- Modular Construction

Model No	Satcom Band	Frequency Range (GHz)	Gain dB nom.	Output @1dB GCP (dBm) min.	Noise Figure (dB) typ.	VSWR Input/Output typ.	Connectors Input/Output & RF Monitor
BSL-000002	I.F.	0.01 - 0.20	30	20	8	2.0:1	SMA (F)
BSL-000020	I.F. & L	0.01 - 2.00	30	20	8	2.0:1	SMA (F)
BSL-009017	L	0.95 - 1.70	30	20	8	2.0:1	SMA (F)
BSL-009020	L	0.95 - 2.05	30	20	8	2.0:1	SMA (F)
BSL-036042	C	3.62 - 4.20	30	20	3	2.0:1	SMA (F)
BSL-036064	C	3.62 - 6.425	25	20	3	2.0:1	SMA (F)
BSL-058064	C	5.845-6.425	25	20	3	2.0:1	SMA (F)
BSL-072077	X	7.25 - 7.75	25	20	4	2.0:1	SMA (F)
BSL-072084	X	7.25 - 8.4	25	20	4	2.0:1	SMA (F)
BSL-079084	X	7.9 - 8.4	25	20	4	2.0:1	SMA (F)
BSL-107127	Ku	10.7 - 12.75	20	20	5	2.0:1	SMA (F)
BSL-107147	Ku	10.7 - 14.5	20	20	5	2.0:1	SMA (F)
BSL-117145	Ku	11.7 - 14.5	20	20	5	2.0:1	SMA (F)
BSL-122145	Ku	12.25 - 14.5	20	20	5	2.0:1	SMA (F)
BSL-127132	Ku	12.75 - 13.25	20	20	5	2.0:1	SMA (F)
BSL-127145	Ku	12.75 - 14.5	20	20	5	2.0:1	SMA (F)
BSL-137145	Ku	13.75 - 14.5	20	20	5	2.0:1	SMA (F)
BSL-036145	C, X & Ku	3.62 - 14.5	20	20	6	2.0:1	SMA (F)
BSL-072145	X & Ku	7.25 - 14.5	20	20	6	2.0:1	SMA (F)
BSL-107184	Ku & DBS	10.7 - 18.4	20	20	6	2.0:1	SMA (F)
BSL-173184	DBS	17.3 - 18.4	20	20	6	2.0:1	SMA (F)
BSL-177212	Ka	17.7 - 21.2	20	20	7	2.0:1	SMA (F)
BSL-280310	Ka	28.0 - 31.0	20	20	8	2.5:1	2.92mm (F)

A range of options is available, some of which will affect the specifications given in the tables. Please contact the factory for full details regarding any particular design.

We reserve the right to change standard product specifications without notice but will be pleased to consider control drawings for quotation.

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