



Model Number: 2430

RF Engineering
and Custom Build

Ku / L-band Block Down Converter Shelf (High)

With 2:1 redundancy switching and Swedish Microwave BDC Module

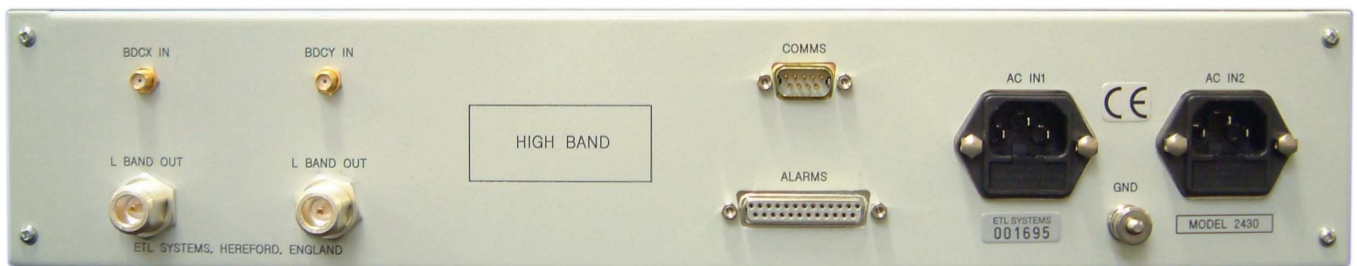


Front View of Model 2430

This High Ku-band (11.70 to 12.75 GHz) to L-band block down converter with 2:1 redundancy switching comprises of 3 BDC Modules , Swedish Microwave model BDC-10.75 N, with a 10.75 GHz LO and output range of 950 – 2000 MHz, housed in a 2U high shelf.

The three BDCs are supply current monitored so that once the monitoring levels are SET any deviation of current will cause the standby BDC to switch in to replace the failing unit. A -20dB BNC monitor port is also supplied on the front panel of the unit for each of the 3 L-band outputs.

The shelf operates in Manual or Auto or Remote modes and a key-switch on the front panel provides mode selection.



Rear View of Model 2430

The unit also benefits from dual redundant power supplies which can be monitored via front panel status LEDs or a dry contact alarm port on the rear panel.





Model Number: 2430

RF Engineering
and Custom Build

*Ku / L-band Block Down Converter Shelf (High) with 2:1
redundancy switching and Swedish Microwave BDC
Module*

Technical specifications and operating parameters

RF Parameters	
Capacity	2:1
Frequency Range	11.70 - 12.75 GHz
Local Oscillator Frequency	10.75 GHz
L-band Output Frequency	950 - 2000 MHz
Gain	20 dB typical
Gain Variation	± 0.4 dB within 30 MHz
Output Return Loss	>9 dB
Noise Figure	3 dB typical
1 dB Compression	+15 dBm typical
IP3	+25 dBm typical
LO Phase Noise	-75 dBc @ 1 kHz
	-85 dBc @ 5 kHz
	-85 dBc @ 10 kHz
	-110 dBc @ 100 kHz
LO stability (over temp)	± 25 kHz (option ± 10 kHz or ext. 10 MHz ref.)
Image Rejection	40 dB

Power	
AC Power	85-264Vac 50/60Hz
PSU	Dual redundant
Hot-swap PSU	No

System Control	
Local Control	Via front panel push buttons
Remote Control	Via rear panel RS232/485 serial port
Display	BDC & PSU condition LED's
Monitor Ports	-20 dB 50Ω BNC on front panel for all 3 BDC outputs

Environmental	
Operating temperature	0 to 45°C
Location	Indoor use only
Storage temperature	-20°C to +75°C
Humidity	85% non-condensing

Physical	
RF Ports (Ku Band)	50Ω SMA (F)
RF Ports (L-band out)	50Ω N-type (F)
Dimensions	2U high x 19" wide
Colour	White 00-E-55 semi-gloss

Key Features	
High (11.70 to 12.75 GHz) Ku to L-band Norsat BDC	
2:1 BDC Redundancy based on BDC current monitoring	
Key switch on front panel	

ETL SYSTEMS LIMITED
Coldwell Radio Station
Madley
Hereford
England HR2 9NE

TELEPHONE
+44 (0)1981 259020

EMAIL
info@etlsystems.com

FACSIMILE
+44 (0)1981 259021

WEB
www.etlsystems.com

