AZ750
Combiner
Azimuth Product Family

AZIMUTH SERIES

Description

The AZ750 is an active L-band combiner designed primarily to bring together several L-band carriers in a single satellite channel.
To equalize the level of the incoming signals, each input has its own amplifier/ attenuator.
The AZ750 can also be used as an active switching device for signal routing purposes or redundancy switching operations.

In its default configuration, the AZ750 combines up to 4 different L-band signals into one L-band signal. As an option it is possible to combine up to 8 different L-band signals within the same unit,.

Optionally, a 24V DC power supply and a reference frequency are also available on the L-band output, providing a compact and cost effective solution when the AZ750 is used in combination with an outdoor RF upconverter and/or amplifier.

The AZ750 can be delivered with an integrated block upconverter as option. In this configuration, the AZ750 converts the L-band output signal of the combiner to C, Ku or DBS-band.

The AZ750 is easy to operate and monitor. All control and monitoring parameters are available locally on the front panel and remotely through a web interface. It is also possible to control or monitor the AZ710 via RMCP or SNMP.

Key features

- Up to 8 L-band inputs
- Each input is switchable and gain adjustable
- Optional upconversion to C, Ku or DBS-band
- Optional 10 MHz + 24Vdc for BUC
- Optional 10 MHz reference input/output
- Advanced monitoring and control

Main advantages

- Highly compact
- High versatility and flexibility
- Cost effective
- Highest standard proven reliability

Applications

- DTH
- Primary distribution
- Contribution

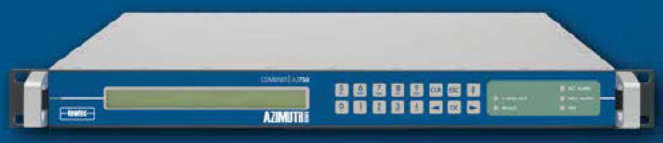
Related products

AZ110 Broadcast Satellite Modulator
EL170 IP Satellite Modulator
AZ710 Upconverter
AZ720 Downconverter
AZ730 Up-Down converter
AZ740 Indoor L-band Block Upconverter

AZ270 1+1 Frequency Converter Redundancy Switch
AZ200 Universal Switching System

Related documents

Care Pack Brochure



Newtec
SHAPING THE FUTURE OF SATELLITE COMMUNICATIONS

BUY NOW

Specifications – AZ750(R6)

Interfaces

Input / output interface: L-band

• Connector	SMA (F), 50 ohms
• Return loss (50 ohms)	>14dB
• Frequency range	950 to 1750 MHz
• Max input power	-10 dBm

Output interface: RF, (optional)

• Connector RF-band out	SMA (F), 50 ohms
• Return loss	>12dB
• Frequency range RF-band	
- C-band :5.85 – 6.65 GHz	
- Ku-band :12.75 – 13.25 GHz	
- Ku-band :13.75 – 14.50 GHz	
- DBS band :17.30 – 18.10 GHz	
- DBS band :17.60 – 18.4 GHz	

Output L-band monitoring (with Upconverter option)

• Connector	SMA (F), 50 ohms
• Return loss	>12 dB
• Gain	0 dB

10 MHz reference input / output (optional)

• Input level	-3dbm up to 7dBm
• Output level	+7dBm
• Connector	BNC (F) – 50 ohms

BUC power and reference frequency (optional)

• max. current	1,5 A
• voltage	24V
• frequency	10MHz
• stability	see Internal Reference Frequency

L-band channel characteristics

• Gain	-30 to 10dB
• Output 1dB compression	+10dBm
• Gain flatness over 36MHz	<± 0.25 dB
• Gain flatness over L-band	<± 1dB
• Spurious(@-10dBm output power)	<-65dBc/4KHz
• L-band output mute	>60 dBc
• Crosstalk	>60 dBc

L-band to RF–band channel characteristics

• Gain (over temperature and frequency)	
- C-band	-30 to 10 dB
- Ku-band 12.75-13.25 GHz	-30 to 10 dB
- Ku-band 13.75-14.50 GHz	-30 to 10 dB
- DBS-band	-20 to 20 dB
• Output 1dB compression C & Ku-band	>0dBm
• Output 1 dB compression DBS-band	>10dBm
• Gain flatness C&Ku-band	±0.60dB/36MHz max
• Gain flatness DBS-band	±0.45dB/36MHz max
• In-band spurious	
Non signal related	<-80dBm
Signal related for rate >200kbaud	
C and Ku-band (up to -10dBm output)	<-65dBc/4kHz
DBS-band (up to 0dBm output)	<-65dBc/4kHz
• RF output mute	>60dBc
• Phase noise	
@ 10 Hz	<-30 dBc/Hz
@ 100 Hz	<-60 dBc/Hz
@ 1 KHz	<-75 dBc/Hz
@ 10 KHz	<-85 dBc/Hz
@ 100 KHz	<-95dBc/Hz
• Residual group delay	1 ns peak-to-peak

Internal Reference frequency

High Stability 1ppm

Stability	±5x10-8 over 0°C to 70°C
Ageing	± 15 ppb/day
	± 300 ppb/year

Very High Stability 0.01ppm (optional)

Stability	±2x10-9 over 0°C to 65°C
Ageing	± 0.5 ppb/day
	± 500 ppb/10 year

Generic

Monitor and control Interfaces

- Web based GUI
- Diagnostics report, alarm log
- RMCP over TCP-IP/UDP and RS232/RS485
- SNMP v2c

Alarm Interface

- Electrical dual contact closure alarm contacts
- Connector 9-pin sub-D (F)
- Logical interface and general device alarm

Physical

- 1RU, width: 19", depth 51 cm,< 6 kg
- Power supply: 90-130 & 180-260 Vac, 105 VA, 47-63 Hz
- Temperature
  - Operational: 0°C to 40°C
  - Storage: -40 to +70°C
- Humidity: 5% to 85% non-condensing
- CE label

Ordering information

AZ 750 L-band combiner		Order n°
Default Configuration		
4-Input L-band combiner, SNMP Output interface: 950 - 1750MHz		AZ750
Configuration options Category	Max. 1 option per category	
Input interface	4-Input L-band	Default
	8-Input L-band	FE-02
Output frequency	L-band (950 - 1750MHz)	Default
	L-band + 10MHz for BUC	FA-02
	L-band + 10MHz + 24Vdc for BUC	FA-03
	L+C-band (5,85 - 6,65 GHz)	FA-04
	L+Ku-band (12,75 - 13,25 GHz)	FA-05
	L+Ku-band (13,75 - 14,50 GHz)	FA-06
	L+DBS-band (17,30-18,10 GHz)	FA-07
	L+DBS-band (17,60-18,40 GHz)	FA-08
10MHz reference In/Out	Internal reference : 1ppm	GR-01
	Internal reference : 0,01 ppm	GR-02
Additional options Category	Max. 1 option per category	
10MHz reference In/Out	High stability	GR-01
	Very high stability	GR-02
Services Category		
Assistance	Care Pack Basic	GA-06
	Care Pack Extended	GA-07

- Other configurations and options, such RF-band amplifiers, L-band splitters or a L-band Upconverter on an additional IF input are available on request.
- Contact your sales representative for details (sales@newtec.eu)