AZ290
1+1 Demodulator Redundancy Switch
Azimuth Product Family

AZIMUTH SERIES

Description

The AZ290 1+1 Demodulator Redundancy Switch product provides a versatile 1 + 1 protection scheme for satellite demodulators. The AZ290 is easy to operate and switches simultaneously the input IF/L-band signals and output data signals.

The switching between the main demodulator and the redundant demodulator can be done automatically through alarm contacts, manually through the front panel or the dedicated web interface, or remotely via a monitoring and control system.

When the automatic mode is activated, the AZ290 monitors the alarm contacts of the two demodulators through cable connections. When an alarm is detected, the input and output switches are toggled, effectively rerouting the input and output signals to the redundant demodulator. The fast switching ensures a minimal service interruption.

In its default configuration, the AZ290 only switches an output ASI or G703 (75 ohms) signal. A wide range of input and output switching options makes the AZ290 compatible with almost any signal used in satellite communications. The range of options includes IF and L-band input switches or splitters as well as ASI, optical, G.703, SDH and HSSI output switches.

The AZ290 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 AZ290 via RMCP or SNMP.

Key features

- Dual redundant power supply
- Automatic or manual operational mode
- Suitable for any demodulator with alarm contacts
- Switching of IF or L-band inputs
- Switching of ASI, G.703, SDH or HSSI outputs
- DC-pass splitter for direct connection to LNB (optional)
- Stand alone operation or integrated in a network management system

Main advantages

- Increases service availability significantly
- Compatible with any demodulator that has alarm contacts
- High reliability
- High compactness
- Easy to operate

Applications

- Broadcast satellite contribution
- Primary distribution
- Any downlink facility

Related products

AZ910 DSNG & Contribution Satellite Demodulator
AZ920 Telco Satellite Demodulator
AZ928 High Speed Telco Satellite Demodulator
AZ930 WAN Satellite Demodulator

AZ200 Universal Switching system
AZ210 1+1 Modulator redundancy Switch
AZ270 1+1 Frequency redundancy Switch

Related Documents

Care Pack Brochure

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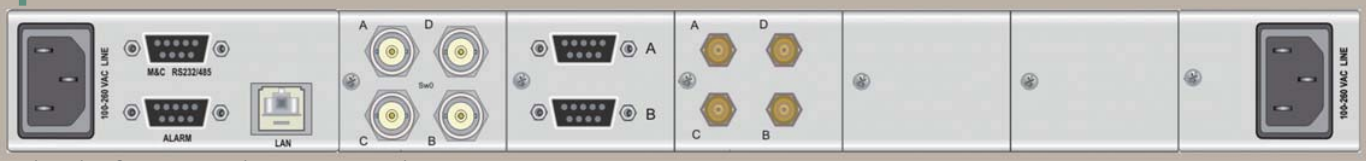
Specifications – AZ290(R6)



Backpanel config: RF input switching, ASI output switching

Input Interface Splitter

IF splitter

• Connector (in, out)	BNC (F) - 75 ohms
• Frequency	40 – 1000 MHz
• Insertion loss	< 5dB
• Isolation	> 15dB

L-band Splitter

• Connector (in ,out)	F (F) – 75 ohms
• Frequency	950 – 2150 MHz
• Insertion loss	< 6dB
• Isolation	> 15dB

Input Interface Switch

L-band (50 ohms, DC-2.5 GHz)

• Connectors	BNC (F) - 50 ohms
• Frequency	DC - 2.5 GHz
• Return loss	> 18 dB (L band)
• Insertion loss	< 0.5 dB
• Isolation	> 75 dB (L band)

L-band (75 ohms, DC – 2.5 GHz)

• Connectors	BNC (F) – 75 ohms
• Frequency	DC – 2.5 GHz
• Return loss	> 18 dB
• Insertion loss	< 0.5 dB
• Isolation	> 75 dB

IF (50 ohms, DC – 270 MHz)

• Connectors	BNC (F) - 50 ohms
• Frequency	DC - 270 MHz
• Insertion loss	< 2 dB
• Isolation	> 50 dB (300 MHz)

IF (75 ohms, DC - 270 MHz)

• Connectors	BNC (F) - 75 ohms
• Frequency	DC - 270 MHz
• Insertion loss	< 2 dB
• Isolation	> 50 dB (300 MHz)

Output interface switch

ASI/G.703

• Connectors	4 x BNC (F) - 75 ohms
• Frequency	DC - 270 MHz
• Insertion loss	< 2 dB
• Isolation	> 50 dB (300 MHz)

Optical, SC, single mode

• Connector	2 x duplex SC receptacles
• Minimum input power	-30dBm
• Minimum output power	-15dBm
• Wavelength	1300 nm
• Compliancy	SONET OC3 & SDH STM1 (S1.1)

Optical, SC, multi mode

• Connector	2 duplex SC receptacles
• Minimum input power	-30dBm
• Minimum output power	-23.5dBm
• Wavelength	1300 nm
• Compliancy	ATM Forum UNI SONET OC-3 Multimode Fiber Physical layer specification

HSSI (optional)

• Connectors	25 pin sub-D (F)
• Frequency	DC - 52 MHz
• Isolation	> 30 dB (balanced)

Generic

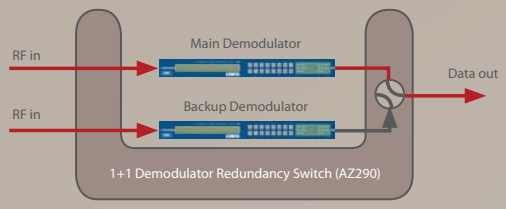
Monitor and control interfaces (via the main unit)

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

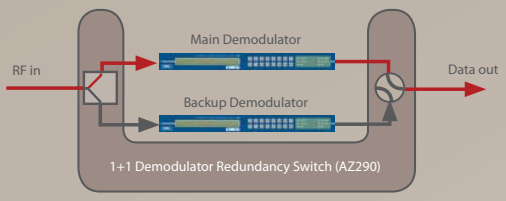
Physical

- 1RU, width: 19", depth 51 cm, 6 kg
- Dual Power supply: 100 - 240VAC, 105 VA, 47-63 Hz
- Temperature
  - Operational: 0°C to 37°C
  - Storage: -40 to +70°C
- Humidity: 5% to 85% non-condensing
- CE label, UL label

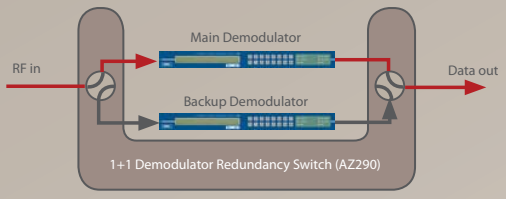
Configurations



No input switching –Cross-over output switching



Input splitter – Cross-over output switching



Cross-over input switching – Cross-over output switching

Ordering information

AZ290 1+1 Deodulator Redundancy Switch		Order n°
1+1 Demodulator Redundancy Switch, SNMP Input interface switch : No input switching Output interface switch: ASI / G.703, BNC 75 ohms, DC - 270 MHz		AZ290
Configuration options Category	Max. 1 option per category	
Input interface switch	No input switching	Default
	IF splitter, 75 ohms, BNC	DC-05
	L-band splitter, 75 ohms, F-type	DC-06
	L-band, BNC, 50 ohms, DC- 2.5 GHz	DC-01
	L-band, BNC, 75 ohms, DC-2.5 GHz	DC-02
	IF, BNC, 50 ohms, DC - 270 MHz	DC-03
	IF, BNC, 75 ohms, DC - 270 MHz	DC-04
Output interface switch	ASI / G.703, BNC 75 ohms	Default
	Optical, SC, single mode fibre	DD-02
	Optical, SC, multi mode fibre	DD-03
	HSSI, 25-pin sub-D	DD-04
Services Category		
Assistance	Care Pack Basic	GA-06
	Care Pack Extended	GA-07

Other configurations such as N+1 protection schemes,
optical splitters are available with the Newtec AZ200 Universal Switching System.

Contact your sales representative for details (sales@newtec.eu)