# AZ202
# Universal Switching System
## Azimuth Product Family

AZIMUTH SERIES

## Description

The AZ202 Universal Switching System is a state-of-the-art product designed to provide a cost effective and scalable 1+1 and N+1 protection scheme for a wide variety of equipment such as modulators, demodulators, modems and converters.
The AZ202 set of advanced features allows optimizing the switching time and implementing efficient IP protection schemes.
The AZ202 meets simple and complex demanding protection requirements by operating and controlling up to 36 switching modules embedded in the main unit, or, for complex configurations, in up to seven AZ203 extension units.
Switching can be done automatically through alarm contacts, manually through the front panel, a dedicated webGUI, or remotely via a monitoring and control system.
When the automatic mode is activated, the AZ202 monitors continuously the protected devices. In case of alarm on one of those, the AZ202 triggers a redundancy switch towards the spare device, according to rules defined by the set of parameters governing the switching operation.
The AZ202 is easy to install, configure, control and operate. Its SNMP interface allows simple integration into NMS systems. The AZ202 also allows defining a large set of switching behaviours through the use of a limited set of parameters.
The AZ202 provides a wide range of switching capabilities for almost any input and output signals used in satellite communications. The range of switchable signals include ASI or IP, as well as IF, L-band or RF band signals.

## Key features

- Dual redundant power supply – Main & Extension unit
- From 1+1 to 16+1 configuration
- Automatic or manual operational mode
- GbE Logical Switching
- Automatic Switch Back
- Copy the full configuration from a device to another
- Automatic memorization of configuration
- Reference device
- GUI with synoptic view
- User-configurable switching logic
- Operates and controls up to 36 switching modules
- Switchable signals: ASI, IP, IF, L-band and RF-band
- Stand alone operation or integrated in a network management system
- Monitoring & Control via SNMP
- Management of Device Configuration

## Main advantages

- High reliability
- Increases service availability significantly
- Optimize switching time
- Cost effective solution
- Future proof solution through scalability
- Easy setup installation
- Flexible deployment and device hot replacement
- Easy to use, control and operate
- Easy integration into NMS systems
- High compactness

## Applications

- DTH
- Broadcast Contribution & Exchange
- DSNG
- TV/Radio Distribution
- IP trunking / Corporate networks
- Telco Backbone
- Government
- Intelligence

## Related products

AZ212 1+1 Modulator Redundancy Switch
AZ7x0 Frequency converters
M6100 Broadcast Satellite Modulator

## Related documents

Care Pack Brochure

Main Unit

Extension Unit

Newtec
SHAPING THE FUTURE OF SATELLITE COMMUNICATIONS

www.newtec.eu

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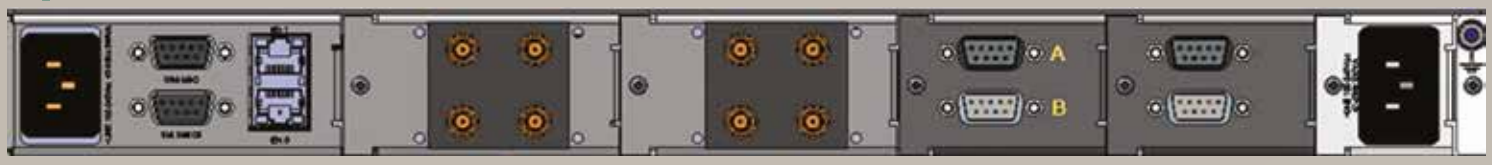
# Specifications – AZ202(R1.1)




## Main interface switches

**IF (50 ohms, DC – 270 MHz) (optional)**

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

**IF (75 ohms, DC - 270 MHz) (optional)**

| | |
|---|---|
| • Connectors | BNC (F) - 75 ohms |
| • Frequency | DC - 270 MHz |
| • Insertion loss | < 2 dB |
| • Isolation | > 50 dB (300 MHz) |
| • Signals | IF, video, G.703, ASI, SDI |

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

| | |
|---|---|
| • 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) |
| • Signals | L-band |

**L-band (toggle, 50 ohms, DC-2.15 GHz) (optional)**

| | |
|---|---|
| • Connectors | SMA (F) - 50 ohms |
| • Frequency | DC - 2.15 GHz |
| • Return loss | > 14 dB (L band) |
| • Insertion loss | < 2.0 dB |
| • Isolation | > 50 dB (L band) |
| • Signals | L-band |

**L-band (75 ohms, DC – 2.5 GHz) (optional)**

| | |
|---|---|
| • Connectors | BNC (F) – 75 ohms |
| • Frequency | DC – 2.5 GHz |
| • Return loss | > 18 dB |
| • Insertion loss | < 0.5 dB |
| • Isolation | > 75 dB |
| • Signals | L-band, HD-SDI |

**L-band (50 ohms, DC – 18 GHz) (optional)**

| | |
|---|---|
| • Connectors | SMA (F) - 50 ohms |
| • Frequency | DC - 18 GHz |
| • Return loss | > 18 dB (L band)<br>>13 dB (RF) |
| • Insertion loss | < 0.5 dB |
| • Isolation | > 75 dB (L band)<br>>60 dB (RF) |
| • Signals | L-band, RF |

**Optical, SC, single mode (optional)**

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

**Optical, SC, multi mode (optional)**

| | |
|---|---|
| • 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 |
| • Signal | SDH |

**HSSI (optional)**

| | |
|---|---|
| • Connectors | 25 pin sub-D (F) |
| • Switch type | 2 inputs/ 2 outputs<br>2 positions: straight & cross-over |
| • Frequency | DC - 52 MHz |
| • Isolation | > 30 dB (balanced) |

Other switching modules for audio signals,
wave guides and data signals are available upon request.

## Input interface splitters

**IF splitter (optional)**

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

**L-band Splitter (optional)**

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

## Generic

**Monitor and control interfaces (via the main unit)**

- Web server GUI (HTTP) via web browser
- Diagnostics report, alarm log (HTTP)
- Control of Newtec devices with RMCP over TCP/IP
- SNMP v.2c/MIB

## Physical (main and extension units)

- 1RU, width: 19", depth 51 cm, 6 kg
- Dual Power supply: 100-240 Vac, 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

## Ordering

The AZ202 will be customized according to your specific needs. Please provide a description of your equipment setup to our sales department to receive a configuration proposal.

Please contact your sales representative for detail (sales@newtec.eu)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