## AZ200

## Universal Switching System Azimuth Product Family

## Description

The AZ200 Universal Switching System is a powerful and modular product designed to provide a cost effective N+1 protection scheme for a wide variety of equipment such as modulators, demodulators, modems, converters, encoders and decoders.
The AZ200 meets simple and complex demanding protection requirements by operating and controlling up to 36 internal switching modules.

The very high modularity of the AZ200 guarantees the design optimization for each configuration, reducing the cost and providing a high reliability.

The internal switching modules are inserted in the AZ200 main unit, or, for complex configurations, in up to eigth AZ201 extension units, connected to the main AZ200 unit.

Switching 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 AZ200 monitors continuously the set of parameters governing the switching operation in order to activate the redundant path while triggering the loading of parameters from memory.

The AZ200 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, G.703, SDH, HSSI or IP interfaces, as well as IF, L-band or RF band signals.

## Key features

- Dual redundant power supply - Main \& Extension unit
- Automatic or manual operational mode
- Operates and controls up to 36 switching modules
- Switchable signals: ASI, IP, G.703, SDH, HSSI, IF, L-band and RF-band
- Stand alone operation or integrated in a network management system
- Suitable for any equipment with alarm contacts


## Main advantages

- Increases service availability significantly
- Low cost solution
- Compatible with any equipment that has alarm contacts
- High reliability
- High compactness
- Scalability


## Applications

- Broadcast contribution and distribution
- IP trunking / Corporate networks
- Any up or downlink facility


## Related products

AZ210 1+1 Modulator Redundancy Switch AZ270 1+1 Frequency Redundancy Switch
AZ290 1+1 Demodulator Redundancy Switch

## Related products

## Care Pack Brochure



Main unit


Extension unit

## Specifications - A2200



## Main Interface Switches

F (50 ohms, DC - 270 MHz ) (optional)

| - Connectors | BNC (F) -50 ohms |
| :--- | :--- |
| - Frequency | DC -270 MHz |
| - Insertion loss | $<2 \mathrm{~dB}$ |
| - Isolation | $>50 \mathrm{~dB}(300 \mathrm{MHz})$ |
| - Signal | IF |

IF ( $\mathbf{7 5}$ ohms, DC - $\mathbf{2 7 0} \mathbf{~ M H z ) ~ ( o p t i o n a l ) ~}$

| - Connectors | BNC (F) -75 ohms |
| :--- | :--- |
| - Frequency | DC -270 MHz |
| - Insertion loss | $<2 \mathrm{~dB}$ |
| - Isolation | $>50 \mathrm{~dB}(300 \mathrm{MHz})$ |
| - Signals | IF, video, G.703, ASI, SDI |


| L-band ( $\mathbf{5 0}$ ohms, $\mathbf{D C} \mathbf{- 2 . 5} \mathbf{~ G H z})$ | (optional) |
| :--- | :--- |
| - Connectors | BNC $(\mathrm{F})-50$ ohms |
| - Frequency | $\mathrm{DC}-2.5 \mathrm{GHz}$ |
| - Return loss | $>18 \mathrm{~dB}(\mathrm{~L}$ band $)$ |
| - Insertion loss | $<0.5 \mathrm{~dB}$ |
| - Isolation | $>75 \mathrm{~dB}(\mathrm{~L}$ band $)$ |
| - Signals | L-band |


| L-band ( $\mathbf{5 0}$ ohms, DC-1.8 GHz) | (optional) |
| :--- | :--- |
| - Connectors | SMA (F) -50 ohms |
| - Frequency | DC -1.8 GHz |
| - Return loss | $>15 \mathrm{~dB}$ |
| - Insertion loss | $<2 \mathrm{~dB}$ |
| - Isolation | $>50 \mathrm{~dB}$ |
| - Signals | L-band |


| L-band ( $\mathbf{7 5}$ ohms, $\mathbf{D C} \mathbf{- 2 . 5} \mathbf{~ G H z}$ ) |  |
| :--- | :--- |
| - Connectors | BNC (F) $-\mathbf{7 5}$ ohms |
| - Frequency | DC -2.5 GHz |
| - Return loss | $>18 \mathrm{~dB}$ |
| - Insertion loss | $<0.5 \mathrm{~dB}$ |
| - Isolation | $>75 \mathrm{~dB}$ |
| - Signals | L-band, HD-SDI |

L-band ( $\mathbf{5 0}$ ohms, DC - $\mathbf{1 8 G H z ) ~ ( o p t i o n a l ) ~}$

- Connectors SMA (F) - 50 ohms
- Frequency DC-18 GHz
- Return loss
$>18 \mathrm{~dB}(\mathrm{~L}$ band) $>13 \mathrm{~dB}$ (RF)
- Insertion loss
- Isolation
$>75 \mathrm{~dB}$ (L band) $>60 \mathrm{~dB}$ (RF)
- Signals

L-band, RF
Optical, SC, single mode

- Connector

2 x duplex SC receptacles

- Minimum input power -30 dBm
- Minimum output power -15 dBm
- Wavelength 1300 nm
- Compliancy SONET OC3 \& SDH STM1 (S1.1)
- Signal

SDH

Optical, SC, multi mode

- Connector
- Minimum input power

2 duplex SC receptacles
Minimam inpat power
-30dBm

- Minimum output power
$-23.5 \mathrm{dBm}$
- Wavelength
- Compliancy
- Signal

ATM Forum UNI SONET OC-3 Multimode
Fiber Physical layer specification
SDH

HSSI (optional)

- Connectors
- Switch type
- Frequency
- Isolation

25 pin sub-D (F)
2 inputs/ 2 outputs
2 positions: straight \& cross-over
DC - 52 MHz
$>30 \mathrm{~dB}$ (balanced)

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

## Input Interface Splitters

IF splitter

- Connector (in, out) BNC (F) - 75 ohms
- Frequency $40-1000 \mathrm{MHz}$
- Insertion loss $<5 \mathrm{~dB}$
- Isolation $>15 \mathrm{~dB}$


## L-band Splitter

- Connector (in, out)
- Frequency

F (F) - 75 ohms

- Frequency
$950-2150 \mathrm{MHz}$
- Insertion loss $<6 \mathrm{~dB}$
- Isolation $>15 \mathrm{~dB}$


## 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 (Main and Extension units)

- 1RU, width: 19", depth 51 cm, 6 kg
- Dual Power supply: 100-240 VAC, 105 VA, $47-63 \mathrm{~Hz}$
- Temperature

$$
\begin{array}{ll}
\text { - Operational: } & 0^{\circ} \mathrm{C} \text { to } 37^{\circ} \mathrm{C} \\
\text { - Storage: } & -40 \text { to }+70^{\circ} \mathrm{C}
\end{array}
$$

- Humidity: $5 \%$ to $85 \%$ non-condensing
- CE label, UL label


## Ordering

The AZ200 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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| :--- | :--- | :--- | :--- | :--- | :--- |
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