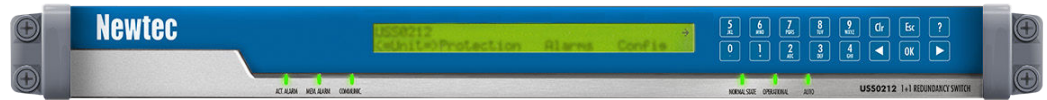


# USS0212

## 1+1 redundancy switch

### (R3.4)



### Description

The USS0212 Universal Redundancy Switch is a state-of-the-art product designed to provide a cost effective and scalable 1+1 protection scheme for modulators, de modulators and modems.

The USS0212 has a set of advanced features which guarantees a very low switching time significantly increasing the service availability. The USS0212 enables the cost effective implementation of reliable IP protection schemes requested by modern IP head-end architecture.

The switch and the switch back operations between the main and the spare modulator can be done automatically through alarm contacts or a redundant Ethernet link and manually through the front panel, a dedicated web GUI, or remotely via a monitoring and control system.

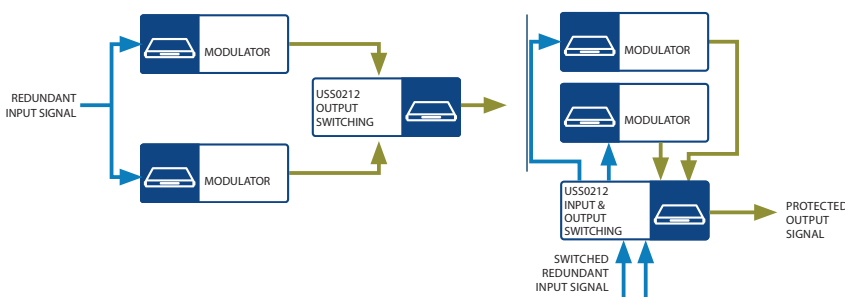
When the automatic mode is activated, the USS0212 continuously monitors the protected devices. When there is an alarm, the USS0212 triggers a redundancy switch towards the devices, in line with rules defined by the set of parameters governing the switching operation. The USS0212 is easy to install, configure, control and operate. The web interface presents an intuitive synoptic view of the setup and the SNMP interface allows simple integration into NMS systems.

### Main Features:

- Switchable signals: ASI/G.703, IF or L-band
- Logical GbE Switching for interfacing with IP modems
- User-configurable switching logic
- Standalone operation or easily integrated into NMS systems via SNMP
- GUI with synoptic view
- Front Panel interface for monitoring and manual operation
- Redundant Ethernet ports for USS Management and Control and Alarm monitoring of devices
- Automatic or manual operational mode
- Automatic Switch Back
- Dual redundant power supply with monitoring
- Fully integrated with platform for easy operation
- Ability to sync configurations between main and backup device, with possibility to exclude some parameters
- Easy operation
- Flexible deployment and device hot swap

### Applications:

Redundancy setups in uplinks or receive stations in the context of Broadcast, IP Trunking or any other application where satellite related earth equipment is deployed in a failsafe, redundant setup.



# Specifications



## Related Products

- M6100 Broadcast Satellite Modulator
- MDM6100 Broadcast Satellite Modem
- MDM6000 Satellite Modem
- MDM9000 Satellite Modem
- USS0202 Universal Redundancy Switch

## Input interface switch

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

## Input interface splitters

- IF (75 OHMS, DC - 270 MHZ)
- Connectors BNC (F) - 75 ohm
  - Frequency DC - 270 MHz
  - Insertion loss < 2 dB
  - Isolation > 50 dB (300 MHz)

- IF (50 OHMS, DC - 270 MHZ)
- Connectors BNC (F) - 50 ohm
  - Frequency DC - 270 MHz
  - Insertion loss < 2 dB
  - Isolation > 50 dB (300 MHz)

- L-BAND (50 OHMS, DC-2.5 GHZ)
- Connectors SMA (F) - 50 ohm
  - Frequency DC - 2.5 GHz
  - Return loss > 18 dB (L band)
  - Insertion loss < 0.5 dB
  - Isolation > 75 dB (L band)

- L-BAND (50 OHMS, DC- 2.15 GHZ)
- Connectors SMA (F) - 50 ohm
  - Frequency DC - 2.15 GHz
  - Return loss > 14 dB
  - Insertion loss < 2 dB
  - Isolation > 50 dB

- L-BAND (50 OHMS, DC - 18 GHZ)
- Connectors SMA (F) - 50 ohm
  - Frequency DC - 18 GHz
  - Return loss > 18 dB (L band) >13 dB (RF)
  - Insertion loss < 0.5 dB
  - Isolation > 75 dB (L band) >60 dB (RF)

## Generic

### MONITOR AND CONTROL INTERFACES

- Web server GUI (HTTP) via web browser
- Diagnostics report, alarm log (HTTP)
- Redundant Ethernet ports for M&C, device control and alarm detection
- Alternative device alarm detection via contact closures
- Control of devices with RMCP over TCP/IP
- SNMP v.2c

## Physical (main and extension units)

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

| USS0212 1+1 Redundancy Switch (R3.4)  |                                     | Ordering n° |
|---|-------------------------------------|-------------|
| <b>Default configuration</b>  |                                     |             |
| 1+1 Redundancy Switch, SNMP<br>Input interface switch: No input switching<br>Output interface switch: IF, BNC, 75 ohm, DC - 270 MHz |                                     | USS0212     |
| <b>Configuration Options</b>  |                                     |             |
| <b>Category</b>   |                                     |             |
| Max. 1 option per category  |                                     |             |
| Input interface switch  | No input switching                  | Default     |
|   | ASI / G.703, BNC 75 ohm             | DA-01       |
|   | GbE Logical Switching               | DA-05       |
| Output interface switch   | IF, BNC, 75 ohm, DC - 270 MHz       | Default     |
|   | IF, BNC, 50 ohm, DC - 270 MHz       | DB-01       |
|   | L-band, BNC, 50 ohm, DC - 2.5 GHz   | DB-03       |
|   | L-band/RF, SMA, 50 ohm, DC - 18 GHz | DB-04       |
|   | L-band, SMA, 50 ohm, DC - 2.15 GHz* | DB-05       |
| <b>Services</b>   |                                     |             |
| <b>Category</b>   |                                     |             |
| Max. 1 option per category  |                                     |             |
| Support   | Care Pack 3 Basic                   | GA-08       |
|   | Care Pack 3 Enhanced                | GA-09       |

(\*) Toggle switch

Contact your sales representative for details