"Instantly switches networks in the physical layer" – Smart Redundancy style.

High Reliability Redundancy Configuration
NSW Series

NTT-AT’s optical switch unit NSW series is a new style of network solution that switches pathways instantly in the “physical layer.”

In addition to the functions of physically selecting, combing, and disconnecting the pathways of optical signals, NSW lets you enjoy the convenience of an Instantaneous, Automatic, Transparent, and Remote Controlled system. 24 hours a day, 365 days a year operation service and remote location operation brings a huge benefit to telecommunication enterprises.

Since the single point link to other communication enterprises and equipment and transmission path of your side of a network can be transparently and simply duplicated, the resulting high availability hot standby redundant structure is especially advantageous. There is also the sense of security of being able to cut connections physically, and a reduction in risks of damage and loss due to problems such as packet storms.

In other words, this optical switch unit is an automatic patch panel. Addressing the weak link in mission critical service of poor measures in the physical layer brings dramatic improvement in operations.

Regular surveillance of optical power and physical switching to instantly restore networks
Dramatically cut network downtime by switching in the physical layer. Realizes an extraordinary network operating ratio of over 99.99%! Surveillance and operation from a remote location is also possible.

Passive device puts top priority on Fail-Safe operation
Because it is a passive (transparent) device, even in the rare chance of a failure in the base or power supply, the communication itself is not affected. Also, brings a high flexibility applicable to all types of optical transmission, regardless of the communications protocol.

Abundant installation record and customized results
NSW has a installation record of more than 10,000 ports in over 30 companies, ISP, CATV enterprises, etc., in Japan and around the world. We also do a wide variety of customizing to match the needs of our customers.

Just leave it to us! The new model base unit NSW-BU-02 is enhanced to accommodate a wide variety of customizing in order to respond to your needs!
Network Equipment Redundancy
Automatically detecting failures and automatically switching to backup systems greatly improve the availability and reliability of your facilities.

Transmission Pathway Redundancy
When deterioration of optical power in the transmission pathway is detected, switching is automatically performed, improving the availability and reliability of the transmission line. Switching back after restoration is also simple and safe.

Appliance Add Bypass
Connecting and disconnecting appliances, such as networks, firewalls and bandwidth control equipment, can be done at high speed.

Router Doubling
When deterioration of optical power in the transmission pathway is detected, switching is automatically performed, improving the availability and reliability of the transmission line. Switching back after restoration is also simple and safe.

Backbone Doubling
When deterioration of optical power in the transmission pathway is detected, switching is automatically performed, improving the availability and reliability of the transmission line. Switching back after restoration is also simple and safe.

Appliance Add Bypass
Connecting and disconnecting appliances, such as networks, firewalls and bandwidth control equipment, can be done at high speed.

Product Specifications: Base Unit (NSW-BU-02)
- **# of slots**: 4
- **# of channels**: 16CH (Max.)
- **Power Input Voltage**: AC 85~265V
- **Power Consumption**: 50W
- **Operating Temperature**: 0~55℃
- **Operating Humidity**: 15~85% (non-condensing)
- **Notes**: ※1 Not including projections

Product Specifications: Module
- **Types of Optical Switch**: 1x2, 2x2, 2x4
- **Optical Switch Operation**: Self maintenance type (maintain the power-off state)
- **Compatible Optical Filters**: SM, MM 50um
- **Optical Loss Detection Level**: approx. -40dBm~+10dBm
- **Switching Protection Time**: 0.17000sec (1msec scale)
- **Wave Length**: SM:1300nm~1600nm, MM:850nm, 1300nm
- **Insertion Loss**: with automatic switch 2dB at※2 without automatic switch 1dB at※2
- **Optical Connector**: SC/SPC, LC/SPC, SC/APC
- **Notes**: ※2 Not including connector

Product Functions
- **Functions**: Automatic Chargeover / Manual Switch / Remote Surveillance / Remote Control / Grouping Linkage / Switch Protection / Switch Mode
- **System Management**: GUI/HTTP / CLI/Console TELNET SSH SNMP v1, v2, v3 / Remote Configuration(RADIUS, TACACS+)
- **High Availability**: syslog / 3 types of account authorities / NTP Time / Synchronization / Fail-safe / External redundant power supply / Hot Swap
- **Notes**: ※3 Functions differ according to the module model. Please contact us for more details.