## **Compact Optical Switch CSW2 Series**



## Switches the optical paths in the physical layer

without interrupting network services.



NTT-AT's optical switch unit, CSW2 series, is a compact model of our existing brand, NSW. The CSW2 brings dedicated protection switching to optical networks for a reasonable cost.



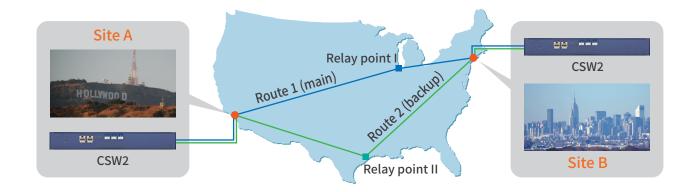
## Regular surveillance of optical power and physical switching to instantly restore networks

Dramatically cut network downtime by switching in the physical layer. Realizes an extraordinary availability of over 99.9999%! CSW2's automatic switching of the optical paths greatly reduces the network operating cost.



# Passive optical device puts top priority on Fail-Safe operation

Because it is a passive (transparent) device, even in the case of a power outage, the network communication itself is not affected. Also, the CSW2 brings high flexibility, applicable to all types of optical transmission, regardless of the communications protocol.







## Transmission Pathway Redundancy

Automatically detecting failures and switching to the backup route without interrupting network services.



## Ring Network Add / Bypass

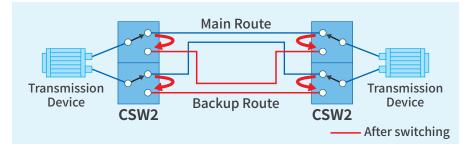
Automatically bypassing the node when the power is lost so that the network services for other nodes continue.



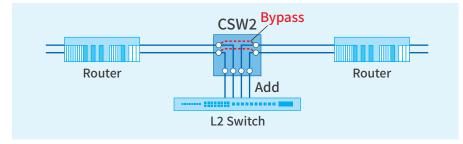
## Network Equipment Redundancy

Automatically switching to backup, which greatly improves the availability and reliability of the services.

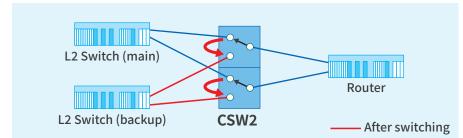
### ■ Backbone Doubling



### ■ Bypassing The Node



### ■ L2 Switch Doubling



### New Feature (1): Power Redundancy (Hot Swap)

Backup power supply will keep the system running in the event of power supply problems.





#### New Feature (2): Serial Console Interface

Equipped with the same console functions as the higher-end NSW models.

#### ■ Product Specifications: CSW2

# of channels	1~4ch
Size	Width 304 x Depth 182 x Height 43mm *1
Power Input Voltage	AC 85∼250V, DC -35∼-72V
Power Consumption	10W≧
Operating Temperature	0~55°C
Operating Humidity	15~85% (non condensing)

※1 Not including projections

#### ■ Product Specifications: Optical Switch

Types of Optical Switch	$1\times2, 2\times4, 1\times2$ +coupler, others **2
Optical Switch Operation	Self maintenance type (maintain the power-off state)
Compatible Optical Fibers	SM、MM 50µm
Optical Loss Detection Level	SM: approx40dBm~+10dBm, MM: approx25dBm~+10dBm
Switching Protection Time	0-17000msec (1msec scale)
Wave Length	SM:1300nm~1600nm, MM:850nm, 1300nm
Insertion Loss	with automatic switch: 2dB **3 without automatic switch: 1dB **3
Optical Connector	SC/SPC, LC/SPC, SC/APC, others **2

\*2 Please contact us for other types. \*3 Not including connector

#### ■ Product Functions \*\*3

Functions	Automatic Changeover / Manual Switch / Remote Surveillance / Remote Control / Grouping Linkage / Switch Protection / Switch Mode
System Management	GUI:HTTP / CLI:Console TELNET SSH SNMP v1, v2C, v3
High Availability	syslog / NTP Time / Synchronization / Fail-safe / External redundant power supply / Hot Swap

\*\*4 Functions differ according to the product model. Please contact us for more details.

#### Notes:

Please understand that all comments and data recorded herein may be subject to change without prior notification.

• Catalog descriptions: as of September, 2025

itatog desemptions, as or deptember, 1920

For more information, please contact

https://keytech.ntt-at.com/en/network/prd\_10229.html

