

# Edge Module Datasheet



N-Connex. Networks for harsh environments.

## Overview

The Edge module provides connectivity to a Gigabit Ethernet backbone. The standard module includes six (6) managed PoE ports to enable a range of solutions. Optionally, the Edge can include two (2) Single Mode fibre ports. Combined with the N-Connex Bolt Access Point, strong and reliable WiFi coverage can be achieved in underground mines, tunnels and heavy industrial facilities. NLT's pre-terminated, rugged Ethernet cable connects multiple Edge modules to form a redundant network topology.

As with all N-Connex modules it is fit-for-purpose and is designed for harsh environments. The module can be mounted on the NLT proprietary quick fit frame or be mounted as a standalone device. The Edge can be connected to the Battery module for continued operation during power outages.

The Edge module supports many advanced network standards to optimise network performance, ease maintenance issues and secure network safety. The Edge and Distribution modules can work concurrently to provide large network topologies and solutions.



## Key Features

- Six (6) 10/100/1000 Mbps RJ45 POE Ports
- Two (2) Fibre Optic Single Mode Ports (comes with NC0500F series)
- IEEE 802.3at 30W PoE, Total PoE budget of 65W
- Support L2+ Switching features including 802.1Q VLAN, Mirroring, Port isolation, IGMP Snooping, DHCP Snooping, LLDP, POE+ management, IP Source Guard, ARP inspection, ACLs etc.
- L2+ features provide better manageability, security, QoS, and performance
- Support for Spanning Tree STP (802.1d) and RSTP (802.1w)
- 52 Gbps Switching Capacity
- Optional Battery Backup Power
- Network Management Capabilities
- IP67 protected enclosure

Matrix is the authorized sales and service distributor of NLT N-Connex in the United States and Africa.

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## Specifications

|                                      |  |
|--------------------------------------|--|
| <b>Standards</b>                     | IEEE 802.3/3u/3ab 10/100/1000 Base-T Ethernet<br>IEEE802.3af/IEEE802.3at POE<br>IEEE 802.1q VLAN and IEEE 802.1p QoS<br>STP(IEEE 802.1d) and RSTP(IEEE 802.1w) |
| <b>Interface</b>                     | 6X 10/100/1000Base-T ports<br>2X Gigabit fibre optic single mode ports   |
| <b>Switching Capacity, Bandwidth</b> | 52Gbps   |
| <b>Spanning Tree Protocol (STP)</b>  | Standard Spanning Tree 802.1d and Rapid Spanning Tree (RSTP) 802.1w  |
| <b>VLAN</b>                          | Support up to 4K VLANs simultaneously (out of 4096 VLAN IDs) ; Port-based VLAN; 802.1q tag-based VLAN  |
| <b>Storm Control</b>                 | Prevents traffic on a LAN from being disrupted by a broadcast, multicast, or unicast storm on a port   |
| <b>QoS, Hardware</b>                 | Supports 8 hardware queues   |
| <b>Congestion Management</b>         | 8 COS queues per port support strict priority and weighted round-robin (WRR)   |
| <b>Jumbo Frames</b>                  | Frame sizes up to 9KB supported on Gigabit interfaces  |
| <b>MAC Table</b>                     | Up to 8K MAC addresses   |
| <b>Max. PoE Power Per Port</b>       | 15.4W (IEEE 802.3af) /30W (IEEE 802.3at)   |
| <b>Total PoE Output Power</b>        | 65W  |
| <b>Input Voltage Range</b>           | 88 - 264VAC  |
| <b>Frequency Range</b>               | 47 - 63Hz  |
| <b>Enclosure Protection Class</b>    | IP67   |
| <b>Unit Dimensions</b>               | 420mm(L) x 257mm (H) x 197mm (D)   |
| <b>Unit Weight</b>                   | 9 kg   |
| <b>Operating Temperature</b>         | -20°C to 40°C  |
| <b>Ambient Humidity</b>              | 5% to 95% RH (non-condensing)  |

## Product Part Numbers

|                  |   |
|------------------|---|
| <b>NC0501</b>    | Edge Module, 6XRJ45, Edge Module, Core Product Only                     |
| <b>NC0501F</b>   | Edge Module, 6XRJ45, 2XFP, SM, Edge Module with Single Mode Fiber Ports |
| <b>NC0501FMM</b> | Edge Module, 6XRJ45, 2XFP, MM, Edge Module with Multi Mode Fiber Ports  |

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