



## N10GSM series

(Full L3 Managed 10G SFP+ SDVoE-ready Switches with 40G- QSFP+ /100G- QSFP28 Uplink)

More information:  
[WWW.NIVEOPROFESSIONAL.COM](http://WWW.NIVEOPROFESSIONAL.COM)  
[INFO@NIVEOPROFESSIONAL.COM](mailto:INFO@NIVEOPROFESSIONAL.COM)



## Product Specification

The N10GSM Series Routing Switches are high performance Ethernet switches to meet next generation Metro, Data Center and Enterprise network requirements. N10GSM is designed based on high-end scalable chipset, which support L3/Data Center/Metro features. The N10GSM comes with complete system software with comprehensive protocols and applications to facilitate rapid service deployment and management for both traditional L3 networks and Data Center networks.

The N10GSM Series offer an effective Ethernet access and aggregation platform to Enterprise, Data Center and Metro application, and distribution of High Definition Uncompressed Video Over IP.

The switches are SDVoE-ready. The platform is designed to handle stacks of up to 288-end points on full unblocked 10G.

The switches even offer link aggregation to support full uncompressed 18G streams.



## Features

### Technical highlights

- Up to 2.4Tbps switching capacity
- Cut-Through switching method
- Very low system power consumption. The maximum power consumption for N10GSM-20Q4Z is 160W, , N10GSM-48X6Q is 190W, N10GSM-32X2Q and N10GSM-32X are 150W
- L3/Data Center capability
- MEF9/14 Service Compliant
- Configurable profiles for different MAC/IP/Data Center distribution
- Up to 128K MAC and 32K IP Routing tables.
- RJ45 Console port and Out-band RJ45 Eth Management port

### L2 Features

- Up to 128K L2 Forwarding Entries
- Jumbo Frames (9600 Bytes)
- 802.1d Spanning Tree Protocol
- 802.1w Rapid Spanning Tree Protocol
- 802.1s Multiple Spanning Tree Protocol
- 802.1ab Link Layer Discovery Protocol
- 802.3x Flow Control
- Storm Control
- MAC limit per port/rate limiting per port
- 802.1Q VLAN(4094 VID)
- Private VLANs
- Port/MAC based VLAN
- 802.1ad Q-in-Q
- 802.3ad Link Aggregation/LACP
- MEF UNI, EVC services



- Multi-Chassis Link Aggregation (MLAG)

### L3 Features

- Up to 32K IPv4 Routes
- IPv4 standard support, ICMP, ARP
- VRF
- RIP v1/v2
- OSPF
- BGP
- 64-way Equal Cost Multi-path Routing (ECMP)
- VRRP
- Virtual ARP (VARP)

### Multicast

- IGMP v1/v2/v3 snooping/ IGMP Querier
- IGMP Fast Leave & Static Join/ IGMP proxy

### Data Center DCB Features

- Data Center TCP
- Per-Priority Flow Control (PFC)
- Data Center Bridging Extensions (DCBX)
- NVGRE, VXLAN, GENEVE
- Open API interfaces to achieve SDN

### Advanced Metro Features

- ERPS (Ethernet Ring Protection Switching)
- ITU-T G.8031/Y.1342 ELPS protocol
- ITU-T G.8032/Y.1344 ERPS protocol
- Ethernet OAM: IEEE 802.1ag/Y.1731
- Link OAM IEEE802.1ah (EFM) support

### Qos

- Up to 8 unicast queue, 4 multicast queue and 1 SPAN queue per port
- Strict priority queueing
- 802.1p based classification
- DSCP based classification and remarking
- Egress Rate Shaping/WRR
- Policers
- Rate limiting

### Security

- Centralized port-based and MAC-based 802.1x authentication
- Standard and extended ACL.
- MAC port binding, port isolation, private VLAN, MAC security and MAC filtering
- DoS attack and CPU traffic protection
- RADIUS
- TACACS+

### Advanced Monitoring and Provisioning

- CPU Mirror
- Elephant Flow Detection(EFD)
- Latency monitor \*
- Buffer monitor \*
- Microburst Detection \*



## Network Management

- 100/1000 Management Port
- RS-232 Serial Console Port
- USB Port
- Telnet and SSHv1/v2
- AAA
- TFTP/FTP
- SNMPv1/v2/v3
- Syslog
- Role based Access Control
- Industry Standard CLI
- Blue Beacon LED for system identification
- WEB UI
- SmartConfig

Note: Features marked with “\*” are in roadmap.

## Applications

A two-tier design has spine switches at the top tier and leaf switches at the bottom tier with servers/compute/storage always attached to leaf switches at the top of every rack and leaf switches uplink to 2 or more spine switches. The N10GSM is ideal for Spine/Leaf network and scalability as provided by the solution.

## Ordering Info

Product	Description
N10GSM32	<ul style="list-style-type: none"><li>• 32 x SFP+ switch, front-to-rear airflow and dual AC power supplies</li></ul>
N10GSM6QF48	<ul style="list-style-type: none"><li>• 48 x SFP+ &amp; 6x40GbE QSFP+ switch, front-to-rear airflow and dual AC power supplies</li></ul>