InscapeData

Total Network Solutions for Wired/Wireless, IP Video, & Smart City Applications

LinkPower™ NL3-28044 L3 Gigabit Managed Ethernet Switch

LinkPower™ NL3-28044 28-Port Layer 3 Full Managed Ethernet Switch

The LinkPower™ NL3-28044 is a high-performance Layer 3 managed Ethernet switch designed for next-generation IP metropolitan area networks, large campus networks, and enterprise networks. It features 4×10/100/1000Base-T RJ45 ports, 4×100/1000Base-X SFP fiber combo ports, 20×100/1000Base-X SFP fiber ports, and 4×1/10G uplink SFP+ fiber ports. The switch supports 1U/19" rack-mount installation.

The NL3-28044 offers comprehensive Layer 3 management functions, including advanced networking protocols such as RIP, OSPF, and DHCP. It delivers high-performance L2/L3/L4 line-speed switching, integrating IPv6, network security, traffic analysis, and virtualization. With redundancy protection, uninterrupted upgrades, and high-reliability technologies, it ensures long-term, stable network communication.

Supporting flexible fiber optic connections, the switch enables scalable 1/10G network expansion based on transmission distance and speed requirements. With a switching capacity of up to 598Gbps and 4×1/10G uplink SFP+ fiber ports, it significantly enhances network bandwidth and core convergence, meeting the high-bandwidth demands of voice, video, and data networks.

Ideal for smart campuses, large smart communities, smart cities, smart transportation, and other high-data applications, the NL3-28044 provides a robust, scalable, and future-ready network solution.

Key Features & Benefits

- **Advanced Hardware Architecture**
  The switch features a high-performance hardware design with multiple RJ45, SFP, and SFP+ ports, ensuring scalability and high-capacity data transmission.

- **Powerful Data Service Guarantee**
  It supports Ethernet OAM, redundancy mechanisms like STP/RSTP/MSTP and VRRP, millisecond-level fault detection, and centralized network management for enhanced reliability and efficiency.

- **Rich Business Features**
  The switch offers advanced L3 routing, IPv6 support, multicast capabilities, and IPv4-to-IPv6 transition technologies, making it ideal for large-scale networks and video applications.

- **Security**
  It includes IEEE 802.1x authentication, DoS attack prevention, and hierarchical command protection to safeguard network operations.

- **Stable and Reliable**
  Energy-efficient Ethernet, intelligent fan speed control, and an advanced power system ensure optimized energy consumption and long-term stability.

- **Easy O&M Management**
  The switch supports real-time monitoring, encrypted management protocols, LLDP for link status evaluation, and multiple network management interfaces for streamlined operations.

Applications

- Smart City
- IP Video Surveillance
- Campus Network
- Wireless Mesh Network
- Border Security Surveillance
- Municipal Network
- Energy & Re neries
- Hospitality Network
- Hotel Resort Network
- Hotspot Integration
- VOIP Service
- Traffic Monitoring

Model	NL3-28044
Interface Characteristics	
Fixed Port	1*RJ45 Console port 4*1/10G uplink SFP+ fiber ports (Data) 20*100/1000Base-X SFP fiber ports (Data) 4*10/100/1000Base-T RJ45 ports (Data) 4*100/1000Base-X SFP fiber combo ports (Data)
Ethernet Port	Port 1-4 can support 10/100/1000Base-T auto-sensing, full/ half duplex MDI/ MDI-X self-adaption
Twisted Pair Transmission	10BASE-T: Cat3,4,5 UTP (≤100 meters) 100BASE-TX: Cat5 or later UTP (≤100 meters) 1000BASE-T: Cat5e or later UTP (≤100 meters)
Optical Fiber Port	1/10G SFP+ optical fiber interface, default no include optical modules (optional single-mode/ multi-mode, single fiber/ dual fiber optical module. LC)
Optical Cable/ Distance	Multi-mode: 850nm/ 0-550m, Single-mode: 1310nm/ 0-40km, 1550nm/ 0-120km.
Chip Parameter	
Network Management Type	L3
Network Protocol	IEEE 802.3u 100Base-TX, IEEE 802.3ab 1000Base-T, IEEE 802.3z 1000Base-X, IEEE 802.3ae 10Gb/s Ethernet, IEEE 802.3x
Forwarding Mode	Store and Forward (Full Wire Speed)
Switching Capacity	598Gbps (non-blocking)
Forwarding Rate @64byte	222Mpps

MAC	16K
Buffer Memory	12M
Jumbo Frame	9K
LED Indicator	Power: PWR (Green), System: SYS (Green), Fiber port: 1-28 (Green)
Power Supply	
Total PWR/ Input Voltage	72W/ (AC100-240V)
Power Consumption	Standby<35W, Full Load<70W
Power Supply	Built-in power supply, AC100~240V 50-60Hz, 1.0A
Physical Parameter	
Operation Temp/ Humidity	-20°C~+55°C, 5%~90% RH Non condensing
Storage Temp/ Humidity	-40°C~+75°C, 5%~95% RH Non condensing
Dimension (L*W*H)	440*208*45mm
Net /Gross Weight	<5.0kg / <5.3kg
Installation	Desktop, 1U/19" cabinet
Certification & Warranty	
Lightning Protection	Port lightning protection: 6KV 8/20us, Protection level: IP30
Certification	CCC, CE mark, commercial, CE/LVD EN62368-1, FCC Part 15 Class B, RoHS
Warranty	3 years, lifelong maintenance.
Network Management Feature	
Virtualization and Stacking	VRRP virtualization stack, active/ standby switching

Port Properties	802.3X flow control
	IEEE 802.3az Green Ethernet
	Limit the rate of ingress/egress ports
	Backpressure flow control in half-duplex mode
	Storm suppression based on bandwidth adjustment and storm filtering
	Storm suppression for unknown unicast, multicast, multicast, and broadcast types
VLAN	4K VLAN, Port-based VLAN, 802.1ad (QinQ) fixed
L2 Ring Network Protocol	Standard ERPS ring network
	Port Fast, Uplink Fast, Backbone Fast
	BPDU Guard, BPDU Filter, Root Guard
	Spanning tree ring network: 802.1d STP, 802.1w RSTP, 802.1s MSTP
IPv4	Inter vlan multiple IP, Inter-area route filtering
	Support multi-domain/multi-domain interoperability
	Routing COST settings, Plain text/MD5 encryption
	RIP v1/v2, OSPF, BGP, VRRP, VRRP preemption, BFD and Track
	Active/standby switchover, Default routing, Policy routing, Static routing
IPv6	IPv6 static routing, RIPng
	IPv6-Ping, IPv6-Tracert, IPv6-Telnet, IPv6-TFTP, IPv6-ICMP
DHCP	DHCP Snooping, DHCP Relay, DHCP Server
Multicast	IGMP Proxy, IGMP V1/2(Snooping)
Mirroring	CPU image
	Port mirroring for incoming port packets
	Mirroring of multiple pairs of 1 destination port
	Perform port mirroring on outgoing port packets

ACL/QoS	ACL verification of source port
	Access list based on source mac
	ACL verification of destination port
	Access lists that support time periods
	SP, WRR, SP+WRR scheduling mode
	ACL verification of source IP address
	Mac access list based on ethernet type
	ACL verification of destination IP address
	8 queues, 802.1P/DSCP priority mapping
	DSCP priority remarking, IP access list-standard ACL
	802.1P(CoS) priority marking, Qos based on DSCP/COS
Security	ARP Aing/Bnding/Proxy, Radius certification
	Port security, Port-based MAC address filtering
	Port isolation, MAC address-based authentication
	Loop detection (private), Single-group port isolation
	802.1X remote authentication, IP source protection
	Storm suppression for multicast/unknown unicast/broadcast
	Port-based 802.1X local authentication, Multiple port isolation
Management	Restore factory mode, RMON event history
	SNMP v1/v2/v3, Console, Telnet, SSH 2.0
	TFTP file upload and download management
	ONV-NMS local platform cluster management
	NTP, Ping, Tracert, SNMP Alarm/Inform/Traps
	SNMP (Simple Network Management Protocol)
	Browser-based WEB management (HTTP, HTTPS)
	User hierarchical management and password protection
	Hierarchical alarm, System log (operation log and alarm log)
System	Web browser: Mozilla Firefox 2.5 or higher, Google Chrome V42 or higher, Cat5 and above Ethernet cable
	TCP/IP, network adapter, and network operating system (such as Microsoft Windows, Linux, Mac OS X) installed on each computer in the network Cat5 and above Ethernet cable