

Industrial Ethernet Switch - FL NAT 2008



2702881

<https://www.phoenixcontact.com/us/products/2702881>

Please be informed that the data shown in this PDF document is generated from our Online Catalog. Please find the complete data in the user documentation. Our General Terms of Use for Downloads are valid.



Managed NAT Switch 2000, 8 RJ45 ports 10/100 Mbps, PROFINET Conformance-Class A, 1:1-NAT, Virtual NAT, IP-Masquerading

Your advantages

- 1:1 NAT, virtual NAT, IP masquerading, port forwarding
- MRP client
- Ambient temperature -40 °C ... 70 °C
- VLANs
- DHCP client, DHCP server (port-based)
- RSTP
- Flexible distribution into several LAN and WAN areas
- Configuration memory
- Slim design
- Web-based management, SNMP
- Easy and fast startup and commissioning with the FL NETWORK MANAGER software
- Suitable for PROFINET and EtherNet/IP™ networks

Commercial Data

Item number	2702881
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to Order (non-returnable)
Sales Key	C23
Product Key	DNN131
Catalog Page	Page 328 (C-6-2019)
GTIN	4055626376622
Weight per Piece (including packing)	386 g
Weight per Piece (excluding packing)	240 g
Customs tariff number	85176200
Country of origin	DE

Technical Data

Dimensions

Width	45 mm
Height	130 mm
Depth	115 mm

Notes

General	Support by phone or on-site (fee is charged)
Utilization restriction	
EMC note	EMC: class A product, see manufacturer's declaration in the download area

Material specifications

Housing material	Polycarbonate fiber reinforced
------------------	--------------------------------

Mounting

Mounting type	DIN rail mounting
---------------	-------------------

Interfaces

Ethernet (RJ45)

Connection method	RJ45
Note on the connection method	Auto negotiation and autocrossing
Transmission speed	10/100 Mbps
Transmission physics	Copper
Transmission length	100 m (per segment)
Signal LEDs	Data receive, link status
No. of channels	8 (RJ45 ports)

Product properties

Type	Book type
Product type	Switch
MTTF	507.8 Years (SN 29500 standard, temperature 25°C, operating cycle 21%)
	246.55 Years (SN 29500 standard, temperature 40°C, operating cycle 34.25%)
	56.66 Years (SN 29500 standard, temperature 55°C, operating cycle 100%)
Special properties	1:1-NAT, Virtual NAT, IP-Masquerading
Signal delay	≥ 6.5 μs (Store and Forward mode, 10/100 Mbps, depending on the frame size)

Insulation characteristics

Protection class	III (VDE 0106)
------------------	----------------

Switch functions

Diagnostic functions	RMON History
	LLDP (Link Layer Discovery Protocol)
	SNMP-Traps
	N:1-Portmirroring
	ACD (Address Conflict Detection)
	SysLog
	CRC-Surveillance
Basic functions	Router for standard routing, NAT, 1:1-NAT and port forwarding
NAT functions	1:1-NAT
	Virtual-NAT
	IP-Masquerading
	Port forwarding
PROFINET conformance class	Conformance-Class A
Filter functions	Quality of Service (8 priority classes)
	Class of Service
	DiffServ/DSCP
	Port-Priorisierung
	VLAN (up to 8 VLANs)
	IGMP Snooping/Querier (v1/v2)
	Auto-Query-Port
IP parameterization	Extended Multicast Filtering
	DHCP-Client
	DHCP server (port based)
MAC address table	BootP
	8k
Management	Web-based management (HTTP/HTTPS)
	Role-based user management (LDAP, RADIUS)
	SNMPv1/v2/v3
	Command-line interface (Telnet, SSH)
Redundancy	MRP (Media Redundancy Protocol)
	RSTP (Rapid Spanning Tree Protocol)
Status and diagnostic indicators	LEDs: US (power supply), 2 LEDs per Ethernet port (Link/Activity and Speed)
Time synchronization	SNTP (Simple Network Time Protocol)

Security functions

Basic functions	Router for standard routing, NAT, 1:1-NAT and port forwarding
-----------------	---

Electrical properties

Local diagnostics	US Supply voltage Green LED
	LNK/ACT Link status Green LED
	SPD Data transmission speed Green LED
Maximum power dissipation for nominal condition	4.86 W (At $U_S = 18$ V DC and 60°C ambient temperature)

Test voltage	500 V DC
Test section	for one minute 500 V DC
Transmission medium	Copper

Supply

Supply voltage (DC)	24 V DC (single)
Supply voltage range	18 V DC ... 32 V DC
Power supply connection	via COMBICON, max. conductor cross section 1.5 mm ²
Residual ripple	3.6 V _{PP} (within the permitted voltage range)
Max. current consumption	0.35 A (At U _S = 18 V DC and 60°C ambient temperature)
Typical current consumption	180 mA (at U _S = 24 V DC and 25 °C ambient temperature)
Current consumption	180 mA

Connection data

Connection method	Screw connection
Note on the connection method	Use only copper connecting cables providing the permitted temperature range (-40 °C ... 75 °C).
Conductor cross section, rigid	0.08 mm ² ... 1.5 mm ²
Conductor cross section, flexible	0.08 mm ² ... 1.5 mm ²
Conductor cross section AWG	28 ... 16
Stripping length	7 mm

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	0 °C ... 60 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Permissible humidity (operation)	10 % ... 95 % (non-condensing)
Permissible humidity (storage/transport)	10 % ... 95 % (non-condensing)
Shock (operation)	30g (EN 60068-2-27)
Vibration (operation)	2g, according to IEC 60068-2-6
Air pressure (operation)	86 kPa ... 108 kPa (1500 m above sea level)
Air pressure (storage/transport)	86 kPa ... 108 kPa

Standards and regulations

Free from substances that could impair the application of coating	Yes
---	-----

Approval data

Conformity/Approvals

UL, USA	UL 61010-1, Ed.3 / UL 61010-2-201, Ed.1
UL, Canada	CSA C22.2 NO.61010-2-201:14, Ed.1 / CSA C22.2 NO.61010-1-12, Ed.3

EMC data

Conformance with EMC directives	EN 61000-6-2 EN 61000-4-2 (ESD) Criterion B EN 61000-6-2 EN 61000-4-3 (electromagnetic fields) Criterion A
---------------------------------	---

Industrial Ethernet Switch - FL NAT 2008



2702881

<https://www.phoenixcontact.com/us/products/2702881>

	EN 61000-6-2 EN 61000-4-4 (EFT burst) Criterion A
	EN 61000-6-2 EN 61000-4-5 (surge) Criterion B
	EN 61000-6-2 EN 61000-4-6 (line noise immunity) Criterion A
	EN 61000-6-2 EN 61000-6-4 (interference) Class A
	EN 61000-6-2 EN 61000-6-4 (conducted interference) Class A
Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
Noise emission	EN 61000-6-4
Noise immunity	EN 61000-6-2

LED signaling

Status display	LEDs: US (power supply), 2 LEDs per Ethernet port (Link/Activity and Speed)
----------------	---

Industrial Ethernet Switch - FL NAT 2008



2702881

<https://www.phoenixcontact.com/us/products/2702881>

Approvals



EAC

Approval ID: RU*-DE.*.B.00741/19



UL Listed

Approval ID: FILE E 238705



cUL Listed

Approval ID: FILE E 238705



EAC

Approval ID: RU*-DE.*.B.00741/19



cUL Listed

Approval ID: FILE E 238705



UL Listed

Approval ID: FILE E 238705

Industrial Ethernet Switch - FL NAT 2008



2702881

<https://www.phoenixcontact.com/us/products/2702881>

Classifications

ECLASS

ECLASS-9.0	19170106
ECLASS-10.0.1	19170401
ECLASS-11.0	19170401

ETIM

ETIM 8.0	EC000734
----------	----------

UNSPSC

UNSPSC 21.0	43222600
-------------	----------

Industrial Ethernet Switch - FL NAT 2008



2702881

<https://www.phoenixcontact.com/us/products/2702881>

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

2702881

<https://www.phoenixcontact.com/us/products/2702881>

Accessories

Program / configuration memory

Program / configuration memory - SD FLASH 512MB - 2988146

<https://www.phoenixcontact.com/us/products/2988146>

Program and configuration memory, plug-in, 512 Mbyte.



Program / configuration memory

Program / configuration memory - SD FLASH 2GB - 2988162

<https://www.phoenixcontact.com/us/products/2988162>

Program and configuration memory, for extending the internal flash memory, pluggable, 2 GB.



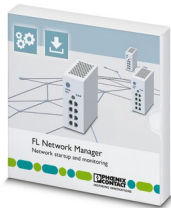
2702881

<https://www.phoenixcontact.com/us/products/2702881>

Network management software

Network management software - FL NETWORK MANAGER BASIC - 2702889

<https://www.phoenixcontact.com/us/products/2702889>



FL Network Manager, SNMP-based configuration and firmware update software, for easy startup of Managed Switches

Driver and interface software

Driver and interface software - FL SNMP OPC SERVER V3 - 2701139

<https://www.phoenixcontact.com/us/products/2701139>



SNMP-OPC server, German and English, for monitoring and configuration of SNMP-capable equipment in HMI and SCADA systems

Industrial Ethernet Switch - FL NAT 2008



2702881

<https://www.phoenixcontact.com/us/products/2702881>

DIN rail adapter

DIN rail adapter - FL DIN RA - 2891053

<https://www.phoenixcontact.com/us/products/2891053>

The FL DIN RA is installed in a standard, 19-inch rack (EIA-310-D, IEC 60297-3-100) to allow DIN rail mounted equipment to be rack mounted.

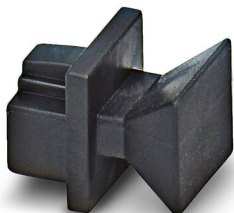


Dust protection

Dust protection - FL RJ45 PROTECT CAP - 2832991

<https://www.phoenixcontact.com/us/products/2832991>

Dust protection caps for RJ45 socket



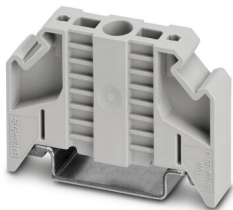
2702881

<https://www.phoenixcontact.com/us/products/2702881>

End clamp

End clamp - E/NS 35 N - 0800886

<https://www.phoenixcontact.com/us/products/0800886>



End clamp, width: 9.5 mm, color: gray

PCB connector

PCB connector - FK-MCP 1,5/ 5-ST-3,81GY35BD1-5 - 1015782

<https://www.phoenixcontact.com/us/products/1015782>



PCB connector, nominal cross section: 1.5 mm², color: light grey, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Female connector, number of potentials: 5, number of rows: 1, number of positions: 5, number of connections: 5, product range: FK-MCP 1,5/...-ST, pitch: 3.81 mm, connection method: Push-in spring connection, conductor/PCB connection direction: 0 °, number of solder pins per potential: 1, plug-in system: COMBICON MC 1,5, locking: without, mounting: without, type of packaging: packed in cardboard

Industrial Ethernet Switch - FL NAT 2008

2702881

<https://www.phoenixcontact.com/us/products/2702881>

PCB connector

PCB connector - MCVW 1,5/ 5-ST-3,81GY7035BD2US - 1034103

<https://www.phoenixcontact.com/us/products/1034103>



PCB connector, nominal cross section: 1.5 mm², color: light grey, nominal current: 8 A, rated voltage (III/2): 160 V, contact surface: Tin, type of contact: Female connector, number of potentials: 5, number of rows: 1, number of positions: 5, number of connections: 5, product range: MCVW 1,5/...-ST, pitch: 3.81 mm, connection method: Screw connection with tension sleeve, screw head form: L Slotted, conductor/PCB connection direction: -90 °, number of solder pins per potential: 1, plug-in system: COMBICON MC 1,5, locking: without, mounting: without, type of packaging: packed in cardboard

Patch cable

Patch cable - FL CAT5 PATCH 0,5 - 2832263

<https://www.phoenixcontact.com/us/products/2832263>



Patch cable, CAT5, assembled, 0.5 m

Industrial Ethernet Switch - FL NAT 2008

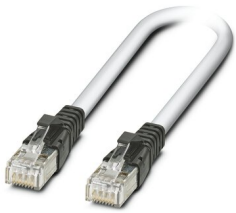
2702881

<https://www.phoenixcontact.com/us/products/2702881>

Patch cable

Patch cable - FL CAT5 PATCH 1,0 - 2832276

<https://www.phoenixcontact.com/us/products/2832276>



Patch cable, CAT5, assembled, 1 m

Patch cable

Patch cable - FL CAT5 PATCH 2,0 - 2832289

<https://www.phoenixcontact.com/us/products/2832289>



Patch cable, CAT5, assembled, 2 m

Industrial Ethernet Switch - FL NAT 2008

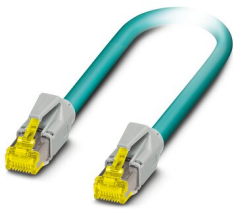
2702881

<https://www.phoenixcontact.com/us/products/2702881>

Patch cable

Patch cable - NBC-R4AC-R4AC-IE8A/.../... - 1411854

<https://www.phoenixcontact.com/us/products/1411854>

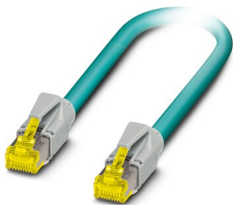


Patch cable, degree of protection: IP20, number of positions: 8, 10 Gbps, CAT6_A, cable outlet: straight, Ethernet

Patch cable

Patch cable - NBC-R4AC/10G-R4AC/10G-94F/2,0 - 1408360

<https://www.phoenixcontact.com/us/products/1408360>



Patch cable, CAT6_A, 4-pair, shielded, connection not crossed (line), assembled at both ends with RJ45/IP20 connectors, outer sheath material: PUR, length: 2.0 m

Industrial Ethernet Switch - FL NAT 2008

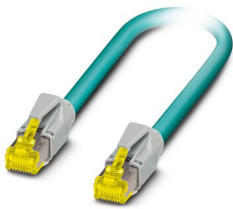
2702881

<https://www.phoenixcontact.com/us/products/2702881>

Patch cable

Patch cable - NBC-R4AC/10G-R4AC/10G-94F/3,0 - 1408365

<https://www.phoenixcontact.com/us/products/1408365>



Patch cable, CAT6_A, 4-pair, shielded, connection not crossed (line), assembled at both ends with RJ45/IP20 connectors, outer sheath material: PUR, length: 3.0 m

Patch cable

Patch cable - NBC-R4AC/1,0-93B/R4AC - 1408968

<https://www.phoenixcontact.com/us/products/1408968>



Patch cable, degree of protection: IP20, cable length: 1 m, number of positions: 4, 100 Mbps, CAT5, material: PA 6.6, PROFINET

Industrial Ethernet Switch - FL NAT 2008



2702881

<https://www.phoenixcontact.com/us/products/2702881>

Patch cable

Patch cable - NBC-R4AC/2,0-93B/R4AC - 1408969

<https://www.phoenixcontact.com/us/products/1408969>



Patch cable, degree of protection: IP20, cable length: 2 m, number of positions: 4, 100 Mbps, CAT5, material: PA 6.6, PROFINET

Patch cable

Patch cable - NBC-R4AC/5,0-93B/R4AC - 1408970

<https://www.phoenixcontact.com/us/products/1408970>



Patch cable, degree of protection: IP20, cable length: 5 m, number of positions: 4, 100 Mbps, CAT5, material: PA 6.6, PROFINET

Phoenix Contact 2022 © - all rights reserved
<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com