

V2724XG (top) and V2724GT (bottom)

V1-24

1/10 Gigabit Ethernet Access Switches

24 port Layer2 Access Switches with 1/10G optical or electrical subscriber interfaces and up to 100 Gbps total uplink capacity.

Features & Benefits

- + Variants with 24x optical single fibre interfaces (1/10GE, SFP) or 24x 10/100/1000 Base-T (RJ45)
- + Uplinks via 4x 25G or 4x 10G with ring protection and link aggregation
- + Extensive Layer2 access switch functions with non-blocking switching architecture
- + Compact 1RU chassis suitable for indoor and outdoor deployments, with AC & DC variants
- + Management via CLI or SNMPv2/v3, plus NETCONF /YANG enabled for SDN network

The V1-24 is a compact Ethernet access switch optimized to enable network operators to offer highspeed broadband services easily and cost-effectively in P2P FTTH or FTTB architectures.

The switch comes in four variants, either with optical or electrical interfaces, and either 1G or 10G subscriber interfaces.

Easy and Flexible Deployment

At only 1RU and 240 mm deep, the V1-24 can easily be deployed in new or existing installations. Due to its extended temperature range, this switch can also be installed in outdoor enclosures – all connections and service LEDs are easily accessible on the front panel. Both AC and DC powering options are supported.

Key Service Attributes

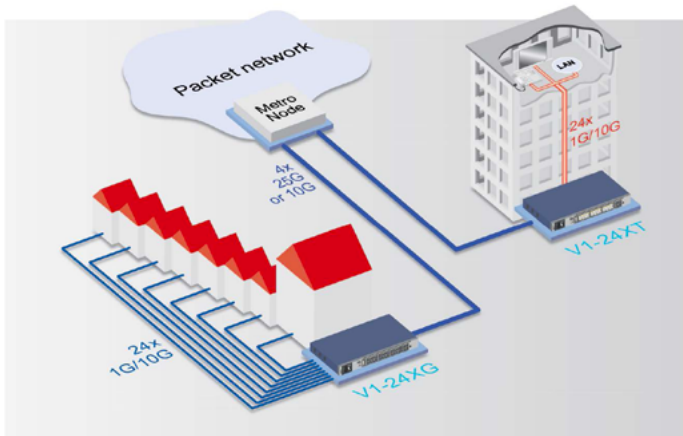
Extensive access switch functionality for residential as well as business subscribers is supported, which allows Triple Play services (Internet access, video and VoIP) as well as business services. Wide range of Layer 2 features such as for example VLAN tagging, VLAN translation, private VLAN, multicast features, QoS, L2 control transparency, rate limiting and security features are provided.

Non-blocking Switching Architecture

The V1-24 offers a non-blocking switching architecture with a capacity of 340 Gbps (10G variants) or 88 Gbps (1G variants). This means that even at full capacity, it always has enough power reserves to transmit data at wire speed, thus providing subscribers with unlimited Internet access

Backhaul

Four dedicated ports are provided in the form of SFP28/SFP+ cages, supporting 25G or 10G backhaul links. The V1-24XG/XT switch variants offer 4 ports for 25GBase-R connections. Backhaul resilience and/or load sharing can be configured via RSTP/MSTP or link aggregation across all 4 ports.



Management

Unit management can be implemented via local serial or Ethernet management ports, as well as inband management. Telnet (CLI) and SNMP v1/v2/ v3 are supported for integration with operators' network management platforms. For integration into SDN networks, the XML-based NETCONF with a YANG data model is available as a network protocol on the switch.

Full choice of ONTs

In addition to the switches, a broad range of complementary ONT models is available, which range from simple media converters to full-featured home gateways with Wi-Fi.

Typical applications with **V1-24XG/XT**

V1-24XX Gigabit Ethernet Access Switch

Product Specifications

Technical Data				
Variants	V1-24XG	V1-24XT	V1-24GG	V1-24GT
24 Subscriber interfaces	1 0GBase-R (SFP+)	1/2.5/5/1 0GBase-T	100/1 000Base-X (SFP)	10/100/1000Base-T
4 Uplink interfaces	25G	25G	10G	10G
Switching capacity	340 Gbps	340 Gbps	88 Gbps	88 Gbps
Function	1 0G/1 G L2 Ethernet access switches			
Layer2 features				
Standards supported	16k MAC addresses in MAC table, IEEE 802.10 tagged frame with 2k VLANs, 1.5 MByte packet buffer size (internal), user port isolation, Jumbo frames with up to 9 kB, QoS, multicast, access loop identification			

V1-24XX Gigabit Ethernet Access Switch

Product Specifications continued

Cyber security				
Standards supported	Broadcast/multicast storm control, authentication: RADIUS, TACACS+ 802.1 x			
Mechanics				
Dimensions (W x H x D)	440 mm x 44 mm x 240 mm			
Management				
CLI, SNMPv2/v3	For inclusion in the OSS of network operators			
SDN	NETCONF/YANG			
Power supply	2724XG	2724XT	2724GG	2724GT
Input voltage nominal (min/max)	100 ... 230 V AC, 50/60 Hz or 48 V DC			
Power consumption	85W	120 W	38 W	26W
Operation environment				
Temperature range operation/storage	-20 °c ... 60 °c (-4 °F ... 140 °F) /-40 °c ... 70 °c (-40 °F ... 158 °F)			
Humidity	0 % ... 90 % (non condensing)			

Ordering Information

Model	Description
V1-24XG	
V1-24XG-DC	24PRT 1U ACCESS SWITCH, 24 FIBER PRTS 1G/10G (SFP+), 4X10G/25G UPLINK (SFP28), DC PWR, NO SFP/OPTICS
V1-24XG-AC-EU	24PRT 1U ACCESS SWITCH, 24 FIBER PRT 1G/10G (SFP+), 4X10G/25G UPLK (SFP28), AC PWR, EU, NO SFP/OPTCS
V1-24XG-AC-NA	24PRT 1U ACCESS SWITCH, 24 FIBER PRT 1G/10G (SFP+), 4X10G/25G UPLK (SFP28), AC PWR, NA, NO SFP/OPTCS
V1-24XG-AC-UK	24PRT 1U ACCESS SWITCH, 24 FIBER PRT 1G/10G (SFP+), 4X10G/25G UPLK (SFP28), AC PWR, UK, NO SFP/OPTCS
V1-24XT	
V1-24XT-DC	24PRT 1U ACCESS SWITCH, 24PRTS ELECT 100M/1G/2.5G/5G/10G (RJ45), 4X10G/25G UPLNK (SFP28),DC PWR
V1-24XT-AC-EU	24PRT 1U ACCESS SWITCH, 24PRTS ELECT 100M/1G/2.5G/5G/10G (RJ45), 4X10G/25G UPLNK (SFP28), AC PWR, EU
V1-24XT-AC-NA	24PRT 1U ACCESS SWITCH, 24PRTS ELECT 100M/1G/2.5G/5G/10G (RJ45), 4X10G/25G UPLNK (SFP28), AC PWR, NA
V1-24XT-AC-UK	24PRT 1U ACCESS SWITCH, 24PRTS ELECT 100M/1G/2.5G/5G/10G (RJ45), 4X10G/25G UPLNK (SFP28), AC PWR, UK

Model	Description
V1-24GG	
V1-24GG-DC	ACCESS SWITCH 24X1GE (SFP), 4X1/10GE (SFP/SFP+) SINGLE DC POWER (BUY)
V1-24GG-AC-EU	ACCESS SWITCH 24X1GE (SFP), 4X1/10GE (SFP/SFP+) SINGLE AC PWR, EU(BUY)
V1-24GG-AC-NA	ACCESS SWITCH 24X1GE (SFP), 4X1/10GE (SFP/SFP+) SINGLE AC PWR, NA(BUY)
V1-24GG-AC-UK	ACCESS SWITCH 24X1GE (SFP), 4X1/10GE (SFP/SFP+) SINGLE AC PWR, UK(BUY)
V1-24GT	
V1-24GT-DC	ACCESS SWITCH 24X1GE (RJ45), 4X1/10GE (SFP/SFP+) SINGLE DC PWR
V1-24GT-AC-EU	ACCESS SWITCH 24X1GE (RJ45), 4X1/10GE (SFP/SFP+) SINGLE AC PWR, EU
V1-24GT-AC-NA	ACCESS SWITCH 24X1GE (RJ45), 4X1/10GE (SFP/SFP+) SINGLE AC PWR, NA
V1-24GT-AC-UK	ACCESS SWITCH 24X1GE (RJ45), 4X1/10GE (SFP/SFP+) SINGLE AC PWR, UK
V1-24XG/XT/GG/GT Accessories	
V1-24XG/XT-PSU-DC	V1-24XG/XT DC POWER SUPPLY MODULE (BUY)
V1-24XG/XT-PSU-AC	V1-24XG/XT AC POWER SUPPLY MODULE (BUY)
V1-24GG/GT-PSU-DC	V1-24GG/GT DC POWER SUPPLY MODULE (BUY)
V1-24GG/GT-PSU-AC	V1-24GG/GT AC POWER SUPPLY MODULE (BUY)
V1-24xx Software Licenses	
SW-SYS-V1-24-R5	BASE SYSTEM SOFTWARE RELEASE 5 FOR V1-24 SERIES L2 SWITCHES (XG, XT VERSIONS)
SW-SYS-V1-24-R2	BASE SYSTEM SOFTWARE RELEASE 2 FOR V1-24 SERIES L2 SWITCHES (GG, GT VERSIONS)
Product Name	Description
20km Transceiver for the subscriber interfaces	
XCVR-AE-SFP+-SBD-1330-20KM-IA	BIDI SFP+ OPTICAL TRANSCEIVER, 10GB/S 1330NM TX 1270NM RX 20KM, DDMI, -40~85 DEG C, SC/UPC
25GE SFP28 transceiver for the WAN Uplink ports:	
XCVR-SFP28-1310NM-10KM-I	SFP28, 1310nm, LONG RANGE, 10KM, I-TEMP.



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