

Product: [XTR-2124-AF](#)

Rack mount XTran node with 24 ports (with FAN)



Product Description

The XTR-2124-AF is a rack mounted High-Port Density network device which is part of the XTran product family. It combines MPLS-TP transport on the backbone with Layer 2 and Layer 3 features on the Ethernet access ports in an integrated industrial IP20 housing which can be 19" rack mounted and is equipped with forced ventilation. The XTR-2124-AF provides a total of 24 Ethernet ports and 2 serial ports. The XTran Access node has a ruggedized design and is compliant with the EMC standards. XTR-2124-AF nodes can be used to build a stand-alone network, or they can be used as an MPLS access network in combination with modular XTran Core and Aggregation nodes.

Technical Specifications

Product Overview

Part Number:	S30926-R2124-XAF
Port Type and Quantity:	LAN/WAN ports (MPLS-TP): 2x 1/10Gbps SFP+ (port 1 & 2) (optical), 2x 1Gbps SFP (port 3 & 4) (optical/electrical); LAN ports (L2/L3): 4x 1Gbps Combo RJ-45/SFP (port 5 - 8) (optical/electrical), 16x 100/1000TX RJ-45 ports with PoE/PoE+ (port 9 - 24)
WAN:	Port 1 & 2: 1/10Gbps SFP+, Port 3 & 4: 1Gbps SFP
Serial:	2x serial ports RJ-45 (RS232/422/485), Asynchronous Serial over Ethernet RS232: Rx, Tx, RTS, CTS, GND, RS422/485: Rx, Tx

More Interfaces

SD-card slot:	1 slot: allows for easy replacement in the field
Digital Input:	Two digital inputs (=DI), to detect an open or closed potential free contact.
Digital Output:	Two digital normally closed (NC) output contacts. Max. Current: 0.5 A DC; Max. Voltage: 30 VDC

Network size - cascading

Line - / star topology:	any
-------------------------	-----

Power requirements

Operating Voltage:	Redundant Power input 24-57VDC (Imax 10A). PoE operation requires 44-57VDC node input voltage, PoE+ operation requires 50-57VDC node input voltage
Power consumption:	< 75W (excluding PoE power) Maximum PoE+ Power = 400W for 16 ports, with maximum 30W per port

Software

Switching:	Sub 50ms protection switching in all network topologies (MPLS-TP), Non-blocking 64 Gbps, 95 Mpps (Layer 2 throughput), MTU up to 9k, 32k MAC addresses, 4k Layer 2 Multicast entries, 2k VFI, 4k MPLS entries, BFD hardware support
Management:	Auto provisioned and auto setup DCN for management, Full SNMP v3 management (no CLI needed), Management port on each CSM module, 2 input contacts allowing forwarding of local alarms to the TXCare platform, 2 output contacts for local triggering of alarms, Removable memory allowing easy replacement of CSM in the field, Hardware supported OAM, Automatic protection switching via BFD, LSP ping and LSP trace via BFD, Performance monitoring based on Y.1731 Loss and Delay
Diagnostics:	Advanced monitoring capabilities based on MPLS-TP OAM enhancements
Security:	Management Communication En-cryption SNMP V3, MAC & IP based ACL, MAC limiting Limit the number of allowed MAC addresses per VLAN, Sticky MAC Convert learned MAC addresses to static and disable MAC learning, IEEE 802.1x authentication NMS Radius Authentication on TXCare NMS (login), SD Card encryption Encryption of configuration data on SD Card, MACSec encryption on WAN link
Routing:	VRF Virtual Routing and Forwarding (virtual routers), VRRP Virtual Router Redundancy Protocol, Static Routing Static routes configured through TXCare NMS, Dynamic Routing OSPF (Open Shortest Path First) routing protocol, Multicast Routing via PIM-SM (Protocol-Independent Multicast), IGMP querier, DHCP Relay
MPLS Switching and Forwarding:	2k VFI, 4k Layer 2 Multicast entries, 4k MPLS entries, 32k MAC addresses, 95 Mpps (Layer 2 throughput), BFD hardware support, MTU up to 9k, Non-blocking 64 Gbp, Sub 50ms protection switching in all network topologies (MPLS-TP)
Layer 2 Ethernet Aggregation:	MSTP (multiple spanning tree), Multicast handling through IGMP, Virtual forwarding instances, VLAN handling, Broadcast and multicast storm control
Quality of Service (QoS):	VLAN based service VLANs can be mapped to a dedicated pseudowire with strict traffic engineering, VLAN priority Priority handling based on IEEE 802.1p, DSCP Priority handling based on the DSCP value of the IP packet, LAN ports (port 5-24) 8 queues/port, WAN ports (port 1-4) Hierarchical scheduler with Strict Priority and Weighted Deficit Round Robin, Traffic engineering per service over the MPLS network Bandwidth, burst size, priority,...
MPLS-TP Service:	E-LINE Point to point service (VPWS), E-LAN Layer 2 VPN, Multipoint (VPLS), L3VPN Layer 3 VPN, Ring/Subrings Logical Ethernet Ring (ERPSv2), E-TREE Multipoint communication allowed only between root and leaves, 1:1, ERP logical rings (<50ms protection switching) Protection schemes

Management Software:	The XTR-2124-AF can be fully managed via the TXCare Network Management System. When the XTR-2124-AF is used as a stand-alone network, the TXCare server can be connected to the management port of one of the nodes (Ethernet port 10) to allow centralized management. TXCare supports user friendly and fast deployment of the network. Supported by the automatic setup of the DCN and OAM features for continuous monitoring with SNMP v3
----------------------	---

Ambient conditions

MTBF (Telcordia SR-332 Issue 4) @ 25°C:	63.8 Years
Operating Temperature Range:	-30°C to +75°C (-22°F to +167°F)
Note:	Cold start is possible at -20°C/-4°F
Storage Temperature Range:	-30° to +75°C (-22° to 167°F)
Relative humidity (non-condensing):	0-95 %

Mechanical construction

Overall Width:	482.6 mm
Overall Height:	43.5 mm
Depth:	262 mm
Weight:	4.30 kg
Mount Type:	19 in
Fan Cooled:	Yes
Protection class:	IP20

Approvals

Basis Standard:	CE, EN 55032:2015 + A11:2020, EN IEC 61000-3-2:2019, EN 61000-3-3:2013 + A2 :2021, EN 55035:2017 + A11:2020, EN IEC 61000-6-1:2019, EN IEC 61000-6-2:2019, EN IEC 61000-6-3:2021, EN IEC 61000-6-4:2019
Safety of industrial control equipment:	EN 62368-1:2014
Power Utility:	EN 61000-6-5:2015, EN 61850-3:2014 (§6.7), IEEE 1613-2009 (§4), IEEE1613-2013 (clause 5,7,8,9,10)
Substation:	IEEE1613, EN 61850-3
Transportation:	EN 50121-4:2016 + A1:2019

Reliability

Guarantee:	Standard 1 year (extension possible)
------------	--------------------------------------

Scope of delivery and accessories

Accessories to Order Separately:	DIN PSU 100-264VAC/88-180VDC 75W@75°C (XTR-2124-AF without PoE): V30812-A5020-A117; DIN PSU 90-264VAC/88-180VDC 228W@65°C (XTR with PoE): V30812-A5020-A118; DIN PSU 85-264VAC/88-180VDC 420W@65°C (XTR with PoE): V30812-A5020-A119; DIN PSU 85-264VAC 600W@75°C (XTR-2124-AF): V30812-A5020-A120; Micro SD Memory Card (16GB Class 10, UHS-I): V30812-A6073-C3
----------------------------------	--

Further Instructions

Product Documentation:	Available via Belden Solutions Portal site
Certificates:	Available via Belden Solutions Portal site
Software Download:	Available via Belden Solutions Portal site

History

Update and Revision:	Revision Number: 0.47 Revision Date: 11-13-2025
----------------------	---

© 2025 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.