

Product: [CSM7100-A](#)



Central Switching Module with MPLS-TP compliant switching fabric for Core nodes

Product Description

The CSM7100-A Central Switching module (=CSM) is the heart of the XTran nodes. This module provides the main processing within the XTran nodes via an Integrated Ethernet Multilayer Switch and onboard Traffic Manager. The CSM7100-A must be plugged into a CSM slot in the core nodes. The CSM provides the ability to use 100Gbps enable ports, a switching capacity of 960Gbps and makes use of a Stratum 3E clock.

Technical Specifications

Product Overview

Part Number:	S30924-Q507-X101
Port Type and Quantity:	1x RJ-45 management port
Switching Capacity:	960 Gbps

More Interfaces

SD-card slot:	1 slot: allows for easy replacement in the field
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Power requirements

Operating Voltage:	+12V
Power consumption:	Measured at 25°C/77°F, with data transport: 80W

Software

Switching:	Sub 50ms protection switching in all network topologies (MPLS-TP), 288k MAC addresses, 24k Layer 2 Multicast entries, 8k VFI, 32k MPLS entries, BFD hardware support, Non-blocking 960 Gbps, 1428 Mpps (Layer 2 throughput)
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:	Sticky MAC for easy locking of MAC address per service, MAC and IP based ACL, SNMPv3 encryption and authentication, Disable unused ports, Locked Node ID's, Logical separation of services, Centralized user authentication and central event logging, Audit trail
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):	Service priority scheduling independent from user traffic to ensure transport functionality of all traffic, End to end traffic engineering through TXCare, 8 Priorities (6 user definable) Per flow statistics and port counters, 4k Flexible queues, Handling of priority queues Strict Priority Based
MPLS-TP Service:	Point to point service (VPWS), Multipoint (VPLS), Logical Ethernet Ring, Protection schemes (1:1, Hitless Switching, ERP logical Rings)
Management Software:	The XT-2215-A can be fully managed via the TXCare Network Management System. 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:	64 Years
Operating Temperature Range:	-20° to +55°C (-4° to 131°F)
Storage Temperature Range:	-30° to +75°C (-22° to 167°F)
Relative humidity (non-condensing):	0-95 %

Mechanical construction

Overall Width:	372.5 mm
Overall Height:	43 mm

Depth:	202 mm
Weight:	1.53 kg
Node Compatibility:	XT-2215-A

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)
Transportation:	EN 50121-4:2016 + A1:2019

Reliability

Guarantee:	Standard 1 year (extension possible)
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Scope of delivery and accessories

Accessories to Order Separately:	Micro SD Memory Card (16GB Class 10, UHS-I): V30812-A6073-C3
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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: 0.23 Revision Date: 11-14-2025
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