



Product: [2-C37.94, T1 TDM Interface \(Forced Power mode\)](#)

XTran Interface Module with 2x C37.94 and 2x T1 RJ-45 ports with forced power mode

Product Description

This IFM converts the C37.94/T1 framing from a C37.94/T1 link into MPLS-TP packets over the XTran network, and vice versa, packetized TDM service is called a Circuit Emulation Service (=CES). A maximum of 16 CESs can be configured per 2-C37.94 module. 2-C37.94 refers to '2 C37.94 ports and 2 T1 ports'. T1 links are used worldwide to implement synchronous TDM links between two end points. These links typically transport voice and/or data using TDM. C37.94 is a standard for transmitting N times 64 kbps on an optical fiber, where N=1,2,...12. It is a protocol used in the power industry between teleprotection and multiplexer equipment. This card operates by default in Forced Power Mode.

Technical Specifications

Product Overview

Part Number:	S30924-Q204-X104
Port Type and Quantity:	2x Optical SFP ports; 2x RJ-45 connectors (T1)
Port Mode:	LAN

Power requirements

Operating Voltage:	+12V
Power consumption:	Measured at 25°C/77°F, with data transport and two SFPs: 8.1W

Features and Protocols

Synchronization:	Sync-E (on E1 ports)
Test & Debugging Features:	Test & Loopback, Loss Measurement (LM) (in aggregation/access nodes), Delay Measurement (DM) (in aggregation/access nodes), Tunnel Ping, Tunnel Traceroute, Port Mirroring (can only be a source, can be mirrored to Ethernet IFMs)
Configurable Services:	Local Mode - C.37.94; Circuit Emulation - C.37.94/T1: SAToP (=Structured Agnostic TDM over Packet), CESoPSN (=Circuit Emulation Service over Packet Switched Network); C37.94 to C37.94 / C37.94 to T1, Hitless Switching, Single Path, Automatic Second Hitless Path, Mux/Demux (SAToP), Channelized SDH-SONET (CSoP Smart SFP) for OC-3

Ambient conditions

MTBF (Telcordia SR-332 Issue 4) @ 25°C:	335 Years
Operating Temperature Range:	With XT-1104-A, XT-2206-A, XT-2209-A, XT-2210-A (aggregation nodes): -30° to +65°C (-22° to 149°F); With XT-2215-A (core nodes): -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:	20.32 mm
Overall Height:	126 mm
Depth:	195 mm
Weight:	0.22 kg

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:	Interface Adapter Kit for Core Nodes: C30965-A9550-D16; SFP for C37.94 - 850nm multimode: V30913-S37-A2; SFP for C37.94 - 1310nm singlemode: V30913-S43-A2
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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: 0.10 Revision Date: 11-14-2025
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