

Mission Critical Communication Transmission and Networking Solutions

Access - Sites

Multiservice Access

DCS / DACS , Gateway IP/Ethernet
E1/T1, Voice protocols, Analog,
Serial transmission, Teleprotection,
Contact, SCADA... to TDM/PDH
*Low Latency, low rate,
high reliability request*

Ethernet for Railway, Airport

Environmental compliance
FE, GE, 10GE, Layer 2 & 3
Fully-protected infrastructure
w/o single point of failure

Ethernet for Power, Smart Grid

Environmental compliance
FE, GE, 10GE, MPLS-TP/CE, L3
IEC61850 protection HSR/PRP
protocol transparency

Ethernet for Industries

FE, GE, 10GE, Carrier Ethernet, L3
DIN-Rail, Modular SFP, RJ45, POE+
-40 to +85°C,
secure network, https

Backbone, Infrastructure

Packet GE/10GE/100GE MPLS-TP, Carrier Ethernet, IP

Bandwidth optimization , OAM,
TDM PseudoWire, Latency transport

SDH/SONET Infrastructure

New, Extension of existing networks
Transport of TDM and Ethernet traffic.
STM1/4/16– OC3/12/48

Hybrid SDH/SONET node & MPLS-TP, Carrier Ethernet, IP

Simultaneous dual networks support
Simplify management and migration

Migration of TDM network

Gateway to IP/Ethernet infrastructure

DWDM and OTN transport

Network extension, RAN, Fiber share
Integrated in Network with management

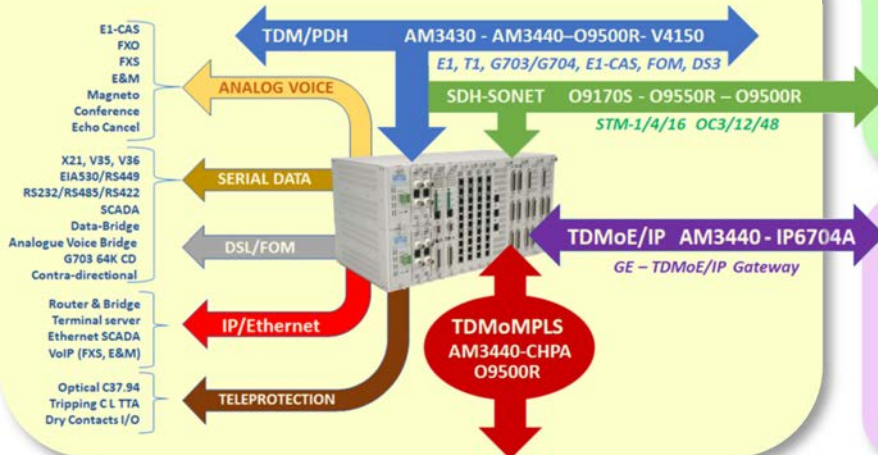
Loop Telecom supplies Analog to 100 Gigabit Ethernet solutions for



- Power Companies, Oil & Gas,
- Railway Transportation including High Speed Rail, MRT, LRT, Tramway
- Air Traffic Control, Airport Ground Transport, ITS,
- TELCO, ISP,
- Military and National Infrastructures,
- Other Industries ...

Multiservice analog/digital TDM/PDH Multiplexing

Cross-Connect TDM/PDH from 2 to 504 E1/T1



SDH/SONET Transport

Versions STM1/4/16 or OC3/12/48
Tributaries E1/T1, E3, EoS, STMxx
Versions with TDM DACS



O9150S / O9400R
O9170S / O9500R

PseudoWire over IP/Ethernet

Packet transport of TDM E1/T1, n 64K, Voice, Serial data Emulation and Synchronization, over GE SyncE. Modular or compact devices.

IP6702A /IP6704A
AM3440 + CCPB
G7860A



Packet Network Transport with MPLS-TP, Carrier Ethernet switch and IP route Networks

| | | | |
|--|--|--|--|
| AM3440-CHEB/ 8GEHSW FE/GE & PDH Access Mux | G7820 GE/10GE G7860A GE/10GE + E1 + SDH | O9x00R +PTN10G GE/10GE, SDH ADM, PDH | G7800* GE/10GE/100GE, SDH, PDH |
|--|--|--|--|

Railway EN50121-4

DIN-Rail to concentration Ethernet Switches/Router for

Power, IEC61850

SFP+, copper, POE+, MACsec, Protection RSTP, MSTP, ERPS v2 no single point of failure, SyncE, PTP 1588 BC & TC

IP6818 / IP6828 / IP6820 / G7820

FE/GE/10GE
Fix or 19" Modular, Fanless

For Power, IEC61850-3, IEEE1613 Protection PRP/HSR, RSTP, MSTP, ERPS v2, SyncE, PTP 1588 BC & TC

IP6810 / IP6820 / IP6838* / G7820 / G7860A

CWDM/DWDM/OTN multiplexing



- Fiber optimization
- 3G/LTE/5G RAN deployment
- 10GE network extension to 160km
- OTN Multiplexing for Ethernet and SDH

WDM1800

Environnemental Monitoring

- Data Center env. security
- Industrial control
- Rail track, transportation

IoT-0510

EMS - NMS system

- Local Craft Interface or Web
- Element Network Management
- Intelligent Network Management with node automatic commissioning

LCT / iNET / iNMS

| Worldwide | Europe | Americas | Australia & New Zealand |
|---|--|--|--|
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