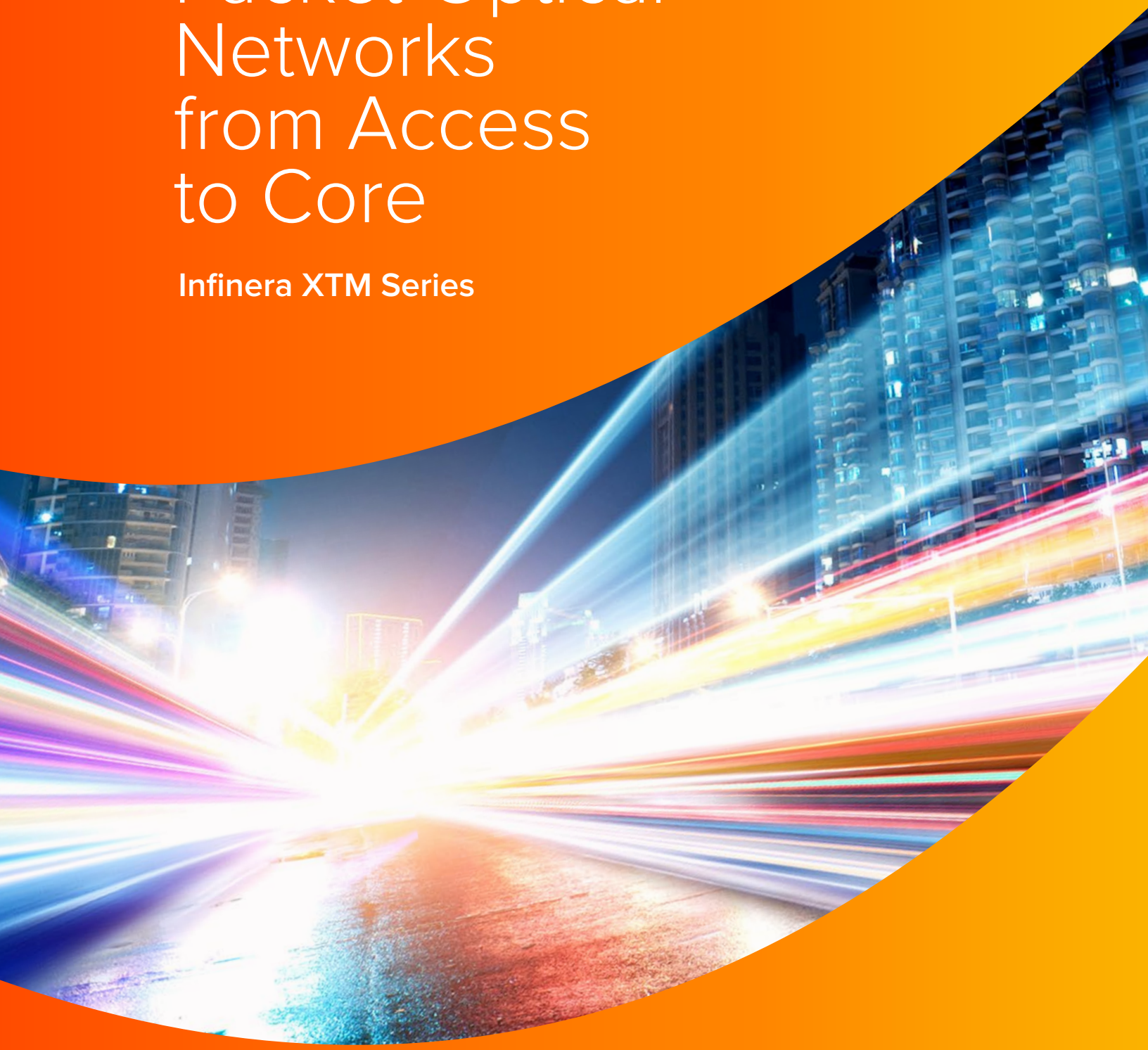
Innovative Packet-Optical Networks from Access to Core

Infinera XTM Series



Infinera®

An Innovative Packet-Optical Metro Network

- Industry-leading key metro capabilities
- From customer premises to 100G core
- Cost-optimized for your application

The Infinera XTM Series packet-optical networking platform delivers high-performance metro access, metro aggregation and metro core networks with industry-leading capabilities in areas such as power, density, latency and synchronization across Layers 0 to 2.5.

Whether used to push wavelength-division multiplexing (WDM) all the way up to the antenna or to the cell site in mobile networks, to connect enterprises together or to the cloud or to deliver high-definition TV (HDTV), the XTM Series provides all the capabilities needed to meet your requirements for a flexible and future-proof metro network.

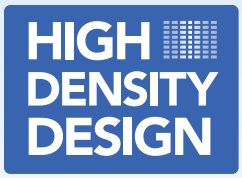
Supporting Layer 0 optical wavelengths to Layer 2.5 Multi-Protocol Label Switching-Transport Profile (MPLS-TP) and using technologies such as Ethernet, Optical Transport Network (OTN), ynchronous Digital Hierarchy (SDH)/Synchronous Optical Networking (SONET) and Intelligent WDM (iWDM®), the XTM Series builds on key design philosophies such as low power, high density and a high level of scalability.

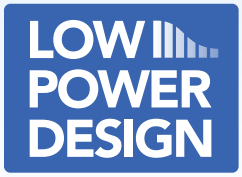
Most recently, we have extended the XTM Series with the XTM II, a significant enhancement to the platform that introduces 200 Gb/s optics, a flex-ready optical layer and software-defined networking (SDN) control via Infinera's Xceed Software Suite, an open, purpose-built, multi-layer SDN platform that enables unified control across metro, long-haul and subsea networks.

High Density + Low Power = Lower Cost

The XTM Series has a heritage of low power and compact products and solutions, fitting ideally in metro deployments or remote access sites where space is scarce and expensive. Single-slot transponders and muxponders are successfully combined with reconfigurable optical add-drop multiplexers (ROADM) and/or packet-optical transport switches (EMXP) in configurations that prove our leading density and low-power capabilities for both Layer 1 optical and Layer 2 Ethernet services. For example, our most recent XTM II solution draws less than 20 watts (W) per 100 gigabits per second (Gb/s) service - a figure that we believe is the lowest among comparable multi-service packet-optical platforms.

Add to this the XTM Series' wide range of chassis options, from small 1 rack unit (1RU) chassis to large 11RU chassis, and it becomes even easier to right-size your network, matching your requirements for low power as well as space.





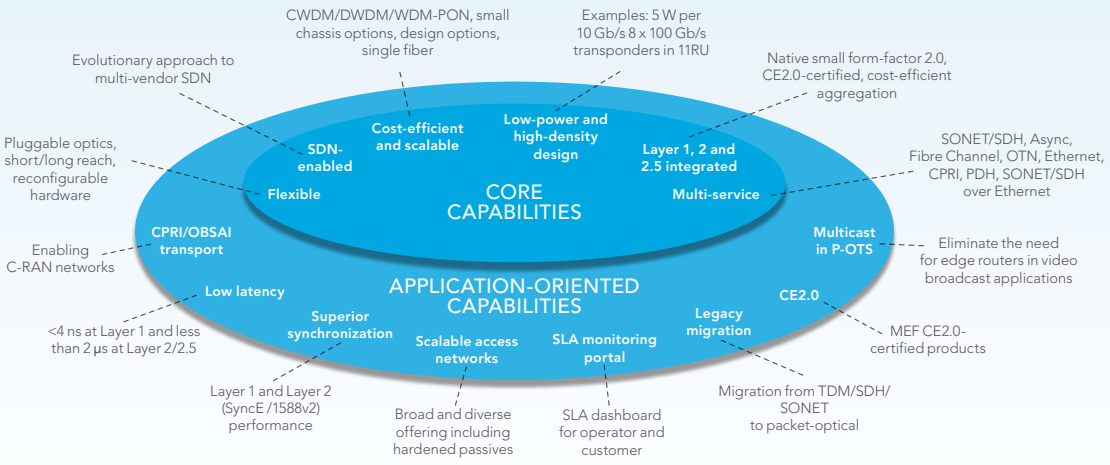
Mobile Fronthaul and Auto-Lambda—Innovations Supporting Mobile and Access Networks

The XTM Series offers a multitude of unique capabilities that make the platform ideal in a number of key applications. Examples include:

- Superior synchronization capabilities that are vital in mobile backhaul, especially as networks evolve to support 5G
- Support for Common Public Radio Interface (CPRI)/Open Base Station Architecture Initiative (OBSAI), enabling WDM in cloud radio access network (C-RAN) architectures and mobile fronthaul applications
- Auto-Lambda, enabling scalable access networks that are easy to install and configure, making them ideal for fiber-deep access applications , such as 5G in mobile networks or distributed access architectures (DAA) in cable networks
- Intelligent small form-factor pluggables (iSFP), enabling transparent delivery of SDH/SONET services over a packet-optical architecture, and eventually a smooth migration of legacy time-division multiplexing (TDM) networks to a common Ethernet/TDM network that fulfills strict synchronization and availability requirements
- True Layer 1/Layer 2 (forward error correction [FEC], OTN transport, MPLS-TP, long-reach optics) all on one blade

The XTM Series Is Ideal in a Broad Range of Network Applications:

- Mobile Transport
- Triple Play Backhaul
- Business Ethernet
- Enterprise
- Metro/Regional Core Networking
- Wholesale



XTM Series Products

Below is a selection of the Infinera XTM Series products. Please contact your Infinera sales representative for a full product range overview.

MUXPONDERS		
4G	MS-MXP	8 client port 4G Multi-service Muxponder. Dual line interfaces for 1+1 protection. SDH/SONET/GbE/SAN. 4 x 4G Regenerator.
10G	MS-MXP/10G	10 client port Multi-service Muxponder. SDH/SONET, Ethernet, SAN, etc. Multiple traffic images. FEC on line. Dual line ports for 1+1 line protection.
	MXP10GOTN	10 client port OTU2 Muxponder. STM-16/OC-48, GbE, 1G/2G/4G FC. GFEC and EFEC on line.
	FH-MXP10G	10 client port Fronthaul Muxponder. CPRI, SyncE.
100G	MXP100GOTN	10 client port coherent CFP-based OTU4 Muxponder. STM-64/OC-192, OTU2, OTU2e, 10GbE LAN, 8G FC in any mix.
200G	MXP200GOTN	14 client port coherent CFP2-based OTU4 Muxponder supporting up to 20 client services. 10/100GbE-LAN, STM-64/OC-192, OTU2/OTU2e/OTU4, 8/16/32G FC.
TRANSPONDERS		
2.5G	TPDDGBE	2 x (2 x GbE) Transponder. Dual line interfaces for 1+1 protection. 4 x 2.5G Regenerator.
4G	TPQMP	Quad Multi-protocol (125 M–4.25 G) Transponder and Regenerator.
10G	TPD10G-Lite	Dual 10G Lite Transponder. 2G/4G/8G/10G FC, 10GbE, STM-64/OC-192, OTU2, OTU2e, CPRI/OBSAI. 2 x 10G Regenerator.
	TPQ10GFEC/I	Quad 10G Multi-service Transponder. STM-64/OC-192, 10 GbE-WAN, 10 GbE-LAN. 2 x Regenerator.
	TPD10GBE	Double 10 GbE FEC Transponder. STM-64/OC-192, 10 GbE-WAN, 10 GbE-LAN. 2 x Regenerator.
	TPMRHEX-Lite	6 x Transparent Transponders on a one-slot unit. 614 Mb/s to 14 Gb/s; see data sheet for details.
	TPHEX10GOTN	6 x OTU2/OTU2e Transponders on a one-slot unit. 10 GbE, SDH/SONET, OTU2, OTU2e, 8G FC.
100G	TP100GOTN	Coherent CFP-based 100G Transponder. OTU4, 100 GbE-LAN.
200G	FXP400GOTN	Dual 200G Coherent CFP2-based Transponder/Muxponder on a one-slot unit. Supporting up to 4 x 100G clients over 2 x 100G or 200G wavelengths. OTU4, 100GbE-LAN.
Layer 2		
1G, 10G	EDU	Ethernet Demarcation Unit. MEF9 + MEF14-certified. Multiple product models available; see data sheet for details.
1G	NID	Network Interface Device. Port device to EMXP/IIe; see data sheet for details.
1G, 10G, 100G, 200G	EMXPII, EMXP/IIe , EMXPIII	Packet-Optical Transport Switch up to 640G. CE2.0, MEF9 + MEF14-certified; MPLS-TP, Sync-E, 1588v2. Multiple product models available; see data sheets for details.
10G, 100G	PT-Fabric	Packet-Optical Transport Switch with frontplane-connected interface modules for 10 G and 100 G services; see data sheet for details.
ROADMs		
	1x2 ROADM	2-degree ROADM, 50/100 GHz.
	1x4 ROADM	4-degree ROADM, 100 GHz.
	1x8 ROADM	8-degree ROADM, 50 GHz.
MISCELLANEOUS OPTICAL NETWORKING EQUIPMENT		
CWDM/DWDM		Wide range of Mux/Demux/OADM units to support up to 80/40-channel DWDM and 8-channel CWDM over dual/single fiber(s).
Amplifiers	OA-RAED, OA26C	Raman/EDFA Hybrid Amplifier, Power Extender C-band.
	OA17, OA20	Several EDFA Amplifier models available with different gain characteristics.
VOA Units	VOA-8CH, VOA-2CH	8-channel (using VOA-SFP) and 2-channel Variable Optical Attenuators.
Power Meters	OCM	DWDM/CWDM Optical Channel Monitoring units.
CHASSIS		

TM-3000II
19", ETSI, 23"
11RU, up to 17 full-sized slots/
10 half-sized slots.

TM-301
19", ETSI, 23"
3RU, up to four full-sized slots/
four half-sized slots.

TM-102II
19", ETSI, 23"
1RU, one full-sized slot/one half-sized slot.

About Infinera

Infinera (NASDAQ: INFN) provides Intelligent Transport Networks, enabling carriers, cloud operators, governments and enterprises to scale network bandwidth, accelerate service innovation and simplify optical network operations. Infinera's end-to-end packet-optical portfolio is designed for long-haul, subsea, data center interconnect and metro applications. Infinera's unique large-scale photonic integrated circuits enable innovative optical networking solutions for the most demanding networks. To learn more about Infinera visit www.infinera.com, follow us on Twitter @Infinera and read our latest blog posts at: blog.infinera.com.

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