



Iskratel Lumia T14

High-performance and high-density
Combo/XGS-PON/GPON/P2P OLT

Key features

Up to 400 Gbps per subscriber blade in dual-star backplane topology

Up to 600 Gbps uplink connectivity and dual-unit stacking mode

Seamless transition to virtualised fibre access

Operating temperature from -40°C to $+65^{\circ}\text{C}$

Flexible chassis configurations for various capacities

Made in the EU

Iskratel Lumia family of OLTs is a product pillar of Iskratel, a specialised telco brand of Kontron. Iskratel unites eight decades of expertise with Kontron's reach and strength.

Iskratel Lumia T14 is a chassis-based, multi-blade Combo OLT with **terabit-capable** backplane. It provides flexible port configuration with Combo PON, XGS-PON, GPON, 10GE P2P or 50G-PON subscriber blades, while its scalable density makes it ideal for deployment in central offices, street cabinets or buildings. Its dual nature supports **conventional and virtualised operation** on the same hardware, allowing operators to avoid an entire investment cycle when migrating towards software-defined access.

Lumia T14 fits **all deployment densities** in urban and rural areas, and delivers flexibility that addresses all use cases in the fibre access.

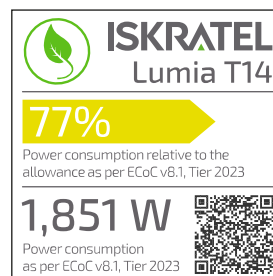
Lumia T14 provides top-of-the-line port density: equipped with Combo PON subscriber blades **Iskratel Lumia C16T**, up to 208 OLT ports serve **more than 50,000 users** from a single chassis.

Lumia T14 is a **14-slot chassis** hosting 12 or 13 subscriber blades and one or two central Ethernet switches for network connectivity. Each subscriber blade is connected to each central switch with a

200 Gbps connection, yielding **400 Gbps per subscriber blade** over a dual-star backplane.

When duplicated, the central switches **Iskratel Lumia P300T** operate in **dual-unit stacking** mode as a single, non-blocking switch with **switching capacity of 3.4 Tbps**, guaranteeing high availability and resiliency with hot-swap.

With its industry-leading temperature range **from -40°C to $+65^{\circ}\text{C}$** , Lumia T14 is deployable at the central office, and at less controlled remote locations such as street cabinets.



Next-generation
broadband access



Conventional or
virtualised operation



Prolonged lifecycle and
lowest five-year TCO

Iskratel Lumia T14: Technical characteristics

Chassis dimensions		
Chassis capacity	14 slots	
Dimensions H × W × D	578 mm (13U) × 482.6 mm × 290 mm ⁽¹⁾	
Rack compliance	ETSI 300 and 19"	
Port capacities	With duplicated central switches	With a single central switch
		
No. of subscriber blades Lumia C16T	12	13
No. of central blades Lumia P300T	2	1
Max. Combo ports (supporting XGS-PON, GPON and 10GE P2P)	192	208
Max. GPON users (at 1:128 split)	24,576	26,624
Max. XGS-PON users (at 1:256 split)	49,152	53,248
Max. 100GE uplink ports	4	2
Max. 10GE/25GE uplink ports	8	4
Max. GE uplink ports	4	2
Max. uplink capacity	600 Gbps	300 Gbps
Max. capacity per subscriber blade	400 Gbps	200 Gbps
PON interfaces		
XGS-PON split ratio	1:256 ⁽²⁾	
GPON and Combo PON split ratio	1:128 ⁽²⁾	
Chassis connectivity and management		
Central switching blades	One or two central Ethernet switching blades, 6× 25GE inter-switch connectivity	
Backplane interfaces	16× 25GE per subscriber blade (dual-star topology)	
IPMI	Blade ID, Chassis ID, Blade status, Blade management, Fan management	
Environmental		
Safety	EN 62368-1:2014 + A11:2017; UL 62368-1; CSA C22.2 No. 62368-1:2014, 2nd edition	
EMC	EN 55032:2015 + A11:2020, EN 55035:2017 + A11:2020, EN 61000-3-2:2019 and EN 61000-3-3:2013 + A1:2019; FCC: 47 CFR Part 15, Subpart B (Clauses 15.107, 15.109) in conjunction with ANSI C63.4:2014; ICES-003, Issue 7 in conjunction with ANSI C63.4:2014	
Storage conditions	ETS 300 019-1-1, class 1.2, temperature −50..+70 °C, relative humidity 10..100%	
Transport conditions	ETS 300 019-1-2, class 2.3	
Operating conditions	ETS 300 019-1-3, class 3.1E, temperature −40..+65 °C, relative humidity 5..90%, non-condensing. Please refer to user manual for details.	
Power supply		
Supply voltage	From −42 V DC to −60 V DC, dual-rail redundancy	
Power consumption	T14 chassis, 12 blades C16T and two blades P300T: 1,851 W typ. (with SFPs), CoC compliant, Tier 2023, 77% consumption T14 chassis, 13 blades C16T and one blade P300T: 1,888 W typ. (with SFPs), CoC compliant, Tier 2023, 78% consumption	

⁽¹⁾ Height given with fibre-cable manager.

⁽²⁾ 1:256 split ratio is supported on XGS-PON-only ports, and 1:128 for GPON/Combo ports. Split ratio may depend on optical power budget and ODN topology.

Ordering code	Description
SBB2500AB	Iskratel Lumia T14 terabit chassis, including filter
SBB2500KC	Iskratel Lumia C16T Combo blade (XGS-PON/GPON/10GE P2P) for Iskratel Lumia terabit chassis
SBB2500KB	Iskratel Lumia C16T Combo blade (XGS-PON/GPON) for Iskratel Lumia terabit chassis
SBB2500BA	Iskratel Lumia P300T central blade for Iskratel Lumia terabit chassis

For more information on Lumia C16T and Lumia P300T, please refer to their individual datasheets.