

SI3000 Lumia shelves (MEC)

The High Performance Broadband Access and Aggregation Node

The SI3000 Lumia is a shelf-based, multi-blade system. A range of highly scalable, high-density shelves make it ideal for deployment in central offices, street cabinets or buildings. A variety of different access blades can be used simultaneously in the same shelf, offering the operators the ultimate degree of flexibility, along with the choice of investment and growth options.

Key Features and Benefits:

- **Carrier-grade** solution
- High **reliability and availability**
- **Dual-star** topology based **on Ethernet**
- **Hot-swap**
- **Flexible configurations** for different capacities
- **Centralized management**
- **Advanced traffic handling** features for residential and business services



The SI3000 Lumia uses two different shelves that are designed for different applications in the multi-service access provider network. The SI3000 Lumia is available in 20-slot and 10-slot shelf. Both shelves offer multi-GE and multi-XGE backplane connectivity. Within a shelf, the SI3000 Lumia hosts one or two central Ethernet switch blades and one or more access blades.

The central Ethernet switches blades feature non-blocking switching matrices, and are available with multiple XGE and GE optical uplinks. Duplicating an Ethernet switch blade in the shelf provides redundancy and high availability of the SI3000 Lumia.

Different access technologies are realized on different access blades. This way, the SI3000 Lumia integrates multiple access types within a single access product. A choice of access blades equips the SI3000 Lumia with GE optical-fibre access, FE optical-fibre access, VDSL2 access and POTS access.

Evolutionary, the SI3000 Lumia represents the next generation of the SI3000 MSAN, a predecessor multi-service access product of Iskratel. All the new access blades for the SI3000 Lumia are backward compatible with and work in the shelves of the SI3000 MSAN.

Available packaging:

MEC20	MEC18	MEC10	MEC6	MEC2U	1Slot
20-slot enclosure for ETSI 300 rack mounting (14U)	18-slot enclosure for 19" rack mounting (14U)	10-slot enclosure for ETSI 300 or 19" rack mounting (6U)	6-slot enclosure for ETSI 300 and 19" rack mounting (4U)	10-slot enclosure for ETSI 300 or 19" rack Mounting (2U)	1-slot enclosure for ETSI 300 or 19" rack Mounting (1U)

Technical Specifications

	20 slots		18 slots		10 slots		6 slots	2 slots	1 slot
	duplication		duplication		duplication				
	no	yes	no	yes	no	yes			
No. of slots for service blades	19	18	17	16	9	8	5	2	1
Max. FTTH P2P ports, GE or FE ports	456	432	408	384	216	192	120	48	24
Max. VDSL2/ADSL2+ ports	1216	1152	1088	1024	576	512	320	128	64
Max. POTS ports	1216	1152	1088	1024	576	512	320	128	64
Max. GE uplink ports on central card	8	16	8	16	8	16	8	2	2
Max. 10GE uplink ports on central card	4	8	4	8	4	8	4	-	-

Local Management interface over Ethernet Switch Blade	
Console	RS232, uUSB
Giga Ethernet	1000 BaseT, RJ-45 – Management port for whole chassis
Features	
Central card support	Two, redundant
IPMI	Service blade identification, Identification of chassis, Blade status information, Blade management, Fan management
Backplane interface	2* 10Gbps interfaces per peripheral card (4* 10Gbps in case of central card duplication)
Dsl vectoring backplane	Yes (not in MEC2U & 1U)
Dimensions	
20 slots chassis, 14U	(H x W x D) 622 x 500 x 240 (*) mm – ETSI rack
18 slots chassis, 14U	(H x W x D) 622 x 450 x 350 (*) mm – 19" rack
10 slots chassis, 6U	(H x W x D) 267 x 450 x 235 (*) mm – ETSI rack, 19" rack
6 slots chassis, 4U	(H x W x D) 178 x 450 x 233 (*) mm – ETSI rack, 19" rack
2 slots chassis, 2U	(H x W x D) 89 x 447 x 237 (*) mm – ETSI rack, 19" rack
* without cables and protrusions	
Environmental conditions	
Safety	EN60950-1:2006 + Am1:2010 + Am11:2009
EMC	ETSI EN 300 386 V1.5.1 (EN55022 Class A, Class B for 1U chassis)
Storage	ETS 300 019-1-1, class 1.2, temperature -50 to 70°C, rel. humidity 10–100%
Transport	ETS 300 019-1-2, class 2.3
Operation	ETS 300 019-1-3, class 3.1E, temperature -5 to 55°C, rel. humidity 5–90% (non condensing)
Other	
Supply voltage	-42V or -72V DC

Ordering code	Description
SBB2239AA	Lumia shelf, 20 slots - MEC 20
SBB2239CA	Lumia shelf, 18 slots - MEC 18
SBB2239BA	Lumia shelf, 10 slots - MEC 10
SBB2239EA	Lumia shelf, 6 slots - MEC 6
SBB2239DA	Lumia shelf, 2 slots - MEC 2U
SBB1028DA	1-slot chassis with one GE electrical and one SFP based ports (w/o SFP) support for up-link
SBB1028DC	1-slot chassis with support of two optical SFP based ports (w/o SFPs) for up-link