PRODUCT SPECIFICATIONS

GIGACORE O26-I
20S10-4S25-2S40

PRELIMINARY

Description: Technical specifications GigaCore O26-I | PRELIMINARY

Gigabit Ethernet switch

The GigaCore O26-I is a **40 Gigabit** Ethernet switch, dedicated to AV integration, installation and touring, designed to support the most advanced AV protocols. GigaCore O26-I is the ideal solution to serve as the high bandwidth backbone for advanced Pro AV networks with a star or mesh topology.

Each GigaCore can be configured through an intuitive built-in AV Web UI but also, System-wide and consistent management across the Luminex network is possible with the Araneo network monitoring, planning and management software. Araneo will boost your productivity and confidence in the network and reduce commissioning times significantly and the complete network can now be managed and supervised with one application.

GigaCore O26-I is an indispensable part of any AV network where higher bandwidth, reliability and a quick and easy setup are needed.

As a user, you don't need to make choices nor tradeoffs as GigaCore handles most AV protocols for you out of the box: Pre-defined QoS/DiffServ (Quality of Service) settings, optimized IGMP (Internet Group Management Protocol) per group (VLAN) and pre-defined yet editable groups (VLANs) to easily separate your network in different applications making converged networks obvious, easy and reliable. Also included out of the box is the advanced, automated redundancy protocol RLinkX that ensures redundant links and ring topology within your GigaCore network.

Bandwidth, connectivity, and port availability are not an issue anymore with 20 x independent SFP+ ports capable of data transfer speeds of up to 10 Gbps and 4 x SFP28 ports for data transfer speeds of up to 25 Gbps and 2x QSFP ports for data transfer of up to 40Gbps.

Time synchronization is crucial in many applications and with GigaCore O26-I you have a hassle free PTPV2 enabled switch which will work for most major audio protocols (e.g. AES67,AVB/Milan, ST2110, Dante, Q-sys/Q-lan, …) without the need for making any complicated device settings.

With 2 built-in power supply units, the question of redundant power is solved in one and the same 1U rack space.
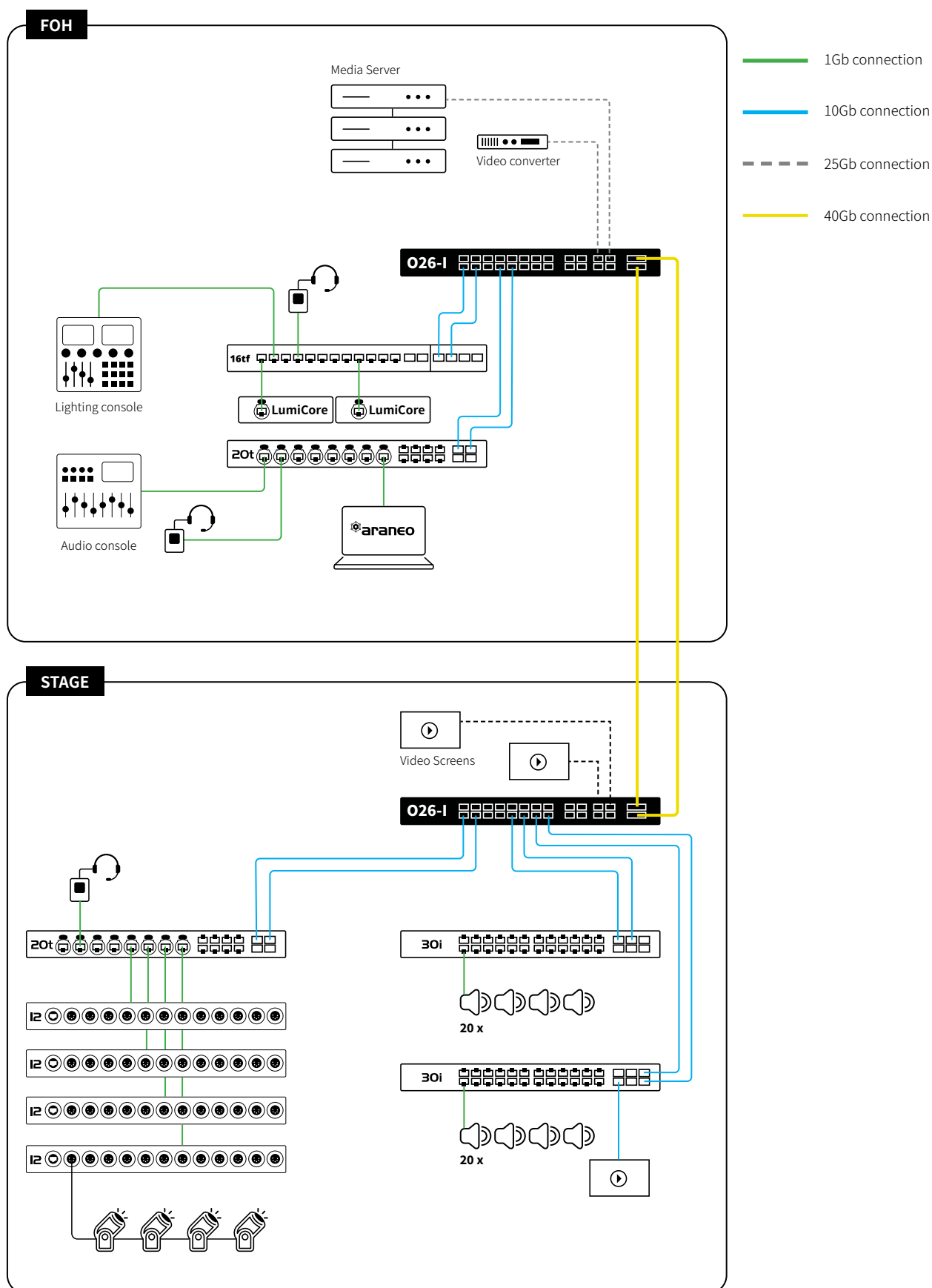
The GigaCore O26-I features Luminex signature per-port RGB group LEDs which help recognize Group (VLAN) assignment for each port.

Applications:

- Large system integrations
- Theaters
- Concert halls
- Convention centers
- Sports arenas
- Broadcast and recording studios, OB vans
- Cruise ships
- Theme parks
- Hospitality installs (Hotels etc)
- And other fixed installations
- …

ORDERING INFORMATION	
Product name:	Part number:
GigaCore O26-I – 20S10-4S25-2S40	LU 01 00101

Luminex

FOH

Media Server

Video converter

1Gb connection

10Gb connection

25Gb connection

40Gb connection

O26-I

Lighting console

16tf

LumiCore   LumiCore

20t

araneo

Audio console

STAGE

Video Screens

O26-I

20t

12

12

12

12

30i

20 x

30i

20 x

TECHNICAL SPECIFICATIONS

MECHANICAL	GigaCore 10t
Enclosure	Robust all metal housing
Dimensions (WxDxH)	482x284x43,2 mm | 19x11,18x1,7 inch (preliminary)
Material thickness	1 mm (to be determined)
Mounting Type	Rack mount
Weight	4.6 kg (preliminary)
Packaging Dimensions	545 x 335 x 125 mm (preliminary)
Packaged Weight	6,5kg (preliminary)
CONNECTIVITY	
Network	20x 10 Gbps / 1 Gbps SFP+ cages on front panel
	4x 25Gps SFP28 cages on front panel
	2x40Gbps QSFP cages on front panel
Power	PowerCON True1 in: 1x for each built-in power supply (2 PSU's built-in)
Backup power	PowerCON True1 in: 1x for each built-in power supply (2 PSU's built-in)
TEMPERATURE MANAGEMENT	
Intelligent Control	Yes
Number of fans	3x
Position of fans	Rear panel
Airflow Direction	Front to rear
USER INTERFACE	
Device status	RGB LEDs
	• OK
	• Power
	• RLinkX
Dynamic labeling	No E-ink Display
10GBPS SFP+ PORT SPECIFICATIONS	
SFP cage type	SFF-8431 (SFP+, backward compatible with SFP)
Port speed	10G BASE-X or 1000 BASE-X
Port sensing	Fixed speed
25GBPS SFP28 PORT SPECIFICATIONS	
SFP cage type	SFF-8402 (SFP28, backward compatible with SFP+ and SFP)
Port speed	25G BASE-X, 10G BASE-X or 1000 BASE-X
Port sensing	Fixed speed
40GBPS QSFP PORT SPECIFICATIONS	
SFP cage type	SFF-8436 (QSFP)
Port speed	40G BASE-X, four times 10G BASE-X
Port sensing	Fixed speed

SWITCH FEATURES	
Boot time	TBC
Redundant links (RLinkX)	Yes
Link Aggregation (MultiLinkX)	Yes
Group function (VLANS)	Yes
Ethernet compliance	IEEE 802.2
	IEEE 802.3
	IEEE 802.3u
	IEEE 802.3x Flow Control
	IEEE 802.3ae
	IEEE 802.1p CoS
	IEEE 802.1d Spanning Tree
	IEEE 802.1w Rapid Spanning Tree
	IEEE 802.1s Multiple Spanning Tree
	IEEE 802.1Q VLAN
	IEEE 802.1Qav MVRP
	IEEE 802.1 BA-2011 -> AVB (Audio Video Bridging)
	IEEE 802.1ab LLDP
	IEEE 1588-2008 PTPv2
Jumbo frames	Yes, supported up to 9,216 bytes MTU (with restrictions when using AVB)
Supported protocols	Avnu AVB/Milan (Free of license)
	Dante
	RAVENNA/AES67
	Ethersound
	Q-SYS/Q-LAN
	IPMX
	sACN
	ArtNet
	MANet
	HogNet
	RTTrPL (BlackTrax)
	ST2110
	…
Audio protocol compliance	Yes, low jitter and hardware timestamping (IEEE 1588-2008)
Ethernet switch type	Full non- blocking wire-speed switching performance
Memory	Flash 1 Gb RAM – 8 Mb NOR flash 4 Gb EMMC storage
Mac Adress table	16384 entries

Adress learning / aging	Self learning, Auto aging
Switching Capacity (Full duplex)	760 Gbps (Full duplex)
Switching thoughput 64Byte	565.48Mpps
IGMP Querrier	Yes (V1|V2|V3)
IGMP Snooping	Yes, enabled by default (V1|V2|V3)
MLD	Yes, enabled by default
L3 Routing	IP interface per Group (VLAN)
DHCP server	Yes
MANAGEMENT	
Configuration	Built-in WebUI
Network wide configuration	Yes, with Araneo software
Firmware upgrades	Via WebUI or network wide with Araneo - Contingency option with second FW file stored
POWER	
Power input	100-240 VAC
Backup power	Yes with 2nd built-in PSU
Power consumption	100W (preliminary)
ENVIRONMENTAL	
Operating temperature	0 to +50 °C
Storage temperature	-40 to +70 °C
Humidity (non condensing)	5 to 95% RH
NOISE LEVEL	
Noise level @ 1m	TBC
APPROVALS PENDING	
Electromagnetic emmissions and immunity	FCC Part 15 CFR 47 class A
	CAN/ICES-003
	EN 61000
	EN 55032
	EN 55024
Safety	IEC 62368-1
	EN 62368-1
	UL 62368-1
	CAN/CSA-C22.2 No. 62368-1
Certificates and approvals	cSGSus Mark (UL)
	CE Mark
	UKCA Mark
	CB Certificate
Green	RoHS
	REACH