

PRODUCT SPECIFICATIONS

GIGACORE S30-I
24R1-6S1 / 24R1-6S1-POE

PRELIMINARY

Description: Technical specifications GigaCore S30-I | PRELIMINARY

Luminex reserves the right to modify the technical specifications at any given time without prior notice.
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MADE IN  BELGIUM

Gigabit Ethernet switch

The GigaCore S30-I is an Ethernet switch dedicated to AV integration, installation, and touring, designed to support the most advanced AV protocols.

In combination with the Araneo software platform, the GigaCore S30-I is the ideal solution to deploy an entire AV network with one click in any fixed installation.

Each GigaCore can be configured through an intuitive built-in AV Web UI, while system-wide and consistent management across the Luminex network is possible with Araneo network monitoring, planning, and management software. Araneo boosts productivity, increases confidence in the network, and significantly reduces commissioning times.

The GigaCore S30-I is an indispensable part of any AV network where reliability and quick, straightforward setup are required. As a user, you don't need to make choices or tradeoffs, as GigaCore handles most AV protocols for you out of the box: predefined QoS/DiffServ (Quality of Service) settings, optimized IGMP (Internet Group Management Protocol) per group (VLAN), and predefined yet editable groups (VLANs) to easily separate your network into different applications. This makes converged networks obvious, simple, and reliable. Also included out of the box is the advanced automated redundancy protocol RLinkX, which ensures redundant links and ring topology within your GigaCore network.

With 6 x independent SFP ports capable of data transfer speed of 1Gbps and 24 x 1Gbps copper ports, GigaCore S30-I offers ample port count.

Time synchronization is crucial in many applications, and with the GigaCore S30-I you have a hassle-free PTPv2 boundary clock-enabled switch that works for most major audio protocols (e.g. AES67, Milan/AVB, ST2110, Dante, Q-SYS/Q-LAN, ...) without the need for complicated device settings.

Entertainment installations constantly push the limits, and the need to deploy PoE-powered devices is continuously increasing. The GigaCore S30-I provides an answer to these scenarios by offering PoE+ on all ports as an option.

Great care has been taken to ensure silent operation by means of intelligent fan control, giving you more installation options with peace of mind that no live audience or recording session will be disturbed.

Every Luminex device is built to deliver lasting performance under the most demanding conditions. All products, regardless of their intended application, undergo the same rigorous testing procedures that our touring-grade models are subjected to. This includes extensive mechanical, thermal, and electrical stress tests designed to ensure robustness, stability, and long-term reliability. Devices developed for fixed installations are engineered and validated to withstand the challenges typically encountered in live touring environments as well, ensuring that users can rely on consistent, trouble-free operation for many years to come.

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)
- Houses of worship
- And other fixed installations
- ...

ORDERING INFORMATION	
Product name:	Part number:
GigaCore S30-I-24R1-6S1	LU 01 00106-1G
GigaCore S30-I-24R1-6S1-POE	LU 01 00106-1G-PoE



TECHNICAL SPECIFICATIONS

MECHANICAL	
Enclosure	Robust all metal housing
Dimensions (WxDxH)	482 x 249,6 x 44 mm (19" x 9,82" x 1,73")
Material thickness	1 mm
Mounting Type	Rack mount
Weight	3,36 kg
Packaging Dimensions	545 x 335 x 125 mm
Packaged Weight	3,92 kg
CONNECTIVITY	
Network	6x 1 Gbps SFP cages on front panel, independent from other ports 24x Gigabit (10/100/1000 BASE-T) copper RJ45 on front panel
Power	PowerCON True1 in
Backup power	No
Backup PoE	No
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 • Device • Power • RLinkX • PoE supply
Fiber port status	2x RGB LED Port Speed/Activity Port Status • Group indication
RJ45 port status	2x RGB LED Port Speed/Activity Port Status • Group indication • PoE • RLinkX • MultiLinkX
FIBER PORT SPECIFICATIONS	
Port speed	1000 BASE-X
Port sensing	Fixed speed
COPPER PORT SPECIFICATIONS	
Port speed	10/100/1000 BASE-T
Port sensing	Auto Negotiation
Auto crossover	MDI/MDIX (allows use of straight or cross wired cable)
Auto sensing	Full or Half Duplex (Gigabit is Full Duplex)
POWER OVER ETHERNET	
Standards	802.3af / 802.3at
PoE Ports	802.3af / 802.3at
Total PoE power budget	300W
LLDP Support	Yes
Power allocation	User configurable: • Priority per port • Consumption vs Class/LLDP based
Power limit	<ul style="list-style-type: none"> Total power budget firmware limit – port shutdown at overload based on port priority Per port hardware and firmware power limits based on classification – port shutdown at overload



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 802.3ab Gigabit Ethernet IEEE 802.3af PoE(optional) IEEE 802.3at PoE+(optional) IEEE 802.1ax 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 IETF RFC2710 IETF RFC3810
Jumbo frames	Yes, supported up to 12000 MTU (with restrictions when using AVB)
Supported protocols	
Audio protocol compliance	Avnu Milan/AVB (free of license) Dante RAVENNA/AES67 ST2110 Ethersound Q-SYS/Q-LAN IPMX sACN ArtNet MANet HogNet RTTrPL (BlackTrax) ...
Ethernet switch type	Full non-blocking wire-speed switching performance
Memory	1 GB RAM – 8 MB NOR flash 4 GB EMMC storage
Mac Address table	16384 entries
Address learning / aging	Self learning, Auto aging
Switching Capacity	60 Gbps
IGMP Querier	Yes V1 V2 V3
IGMP Snooping	Yes, enabled by default (V1 V2 V3)
MLD	Yes, enabled by default
L3 Routing	No
DHCP server	No
Firmware upgrades	Via WebUI or network wide with Araneo - Contingency option with second FW file stored



POWER	
Power input	100-240 VAC
Backup power	No
Backup PoE	No
Power consumption	TBC
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	
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 CB Certificate
Green	RoHS REACH



