Luminex
NETWORK INTELLIGENCE

PRODUCT SPECIFICATIONS

LumiNode 4

Description: Technical specifications LumiNode 4 | REVISION: 20230215-REV 1.0.6

MADE IN BELGIUM

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1. APPLICATIONS

Ethernet / DMX processing device

The LumiNode 4 is an easy to deploy and maintain ethernet/DMX processing device for converting, routing, and merging DMX/RDM data on a network.

The unit is specifically designed with an all metal, robust enclosure for rack mounting or truss mounting, making it an ideal solution for touring, theatre- and studio AV installs or for use at live performances. Equipped with 2x 1Gb Ethercon ports and 4x 5-pin DMX ports LumiNode 4 offers flexibility in a ½ 19" package. Each port is fully optically and galvanically isolated and can be configured as an in- or output. All relevant industry standard protocols such as Art-Net, sACN, KiNET, RTTRpl (Blacktrax) are supported and can be processed and converted in 6 onboard process engines supporting HTP, LTP, Crossfade, Backup, Switch and Custom merging modes with soft patch functionality. LumiNode 4 also supports remote device management (RDM), has automatic functional and operational redundancy and recovery to reliably cope with the most challenging lighting tasks. A show recording and play-back mode lets you conveniently store lighting scenes and play these back when triggered to do so. An external contact closure is included as standard to allow for example to playback a lighting scenes in case of emergency. LumiNode 4 is efficient and has a low power consumption and can be powered via PoE or via mains with robust a Neutrik powercon connector.

LumiNode 4 is easy and intuitively to operate with a built-in color display and control jog for easy access to universe numbers for example. Configuration can also be done through a built in web-based user interface. The fully documented open API facilitates full integration with any 3rd party control or management system.

With its two 1 Gigabit ethernet ports, LumiNode 4 offers the possibility of a split network interface, with individual IP-addresses, making it possible to separate the lighting network data streams from IT related data, allowing for remote status monitoring and management without interfering with critical lighting control data streams.

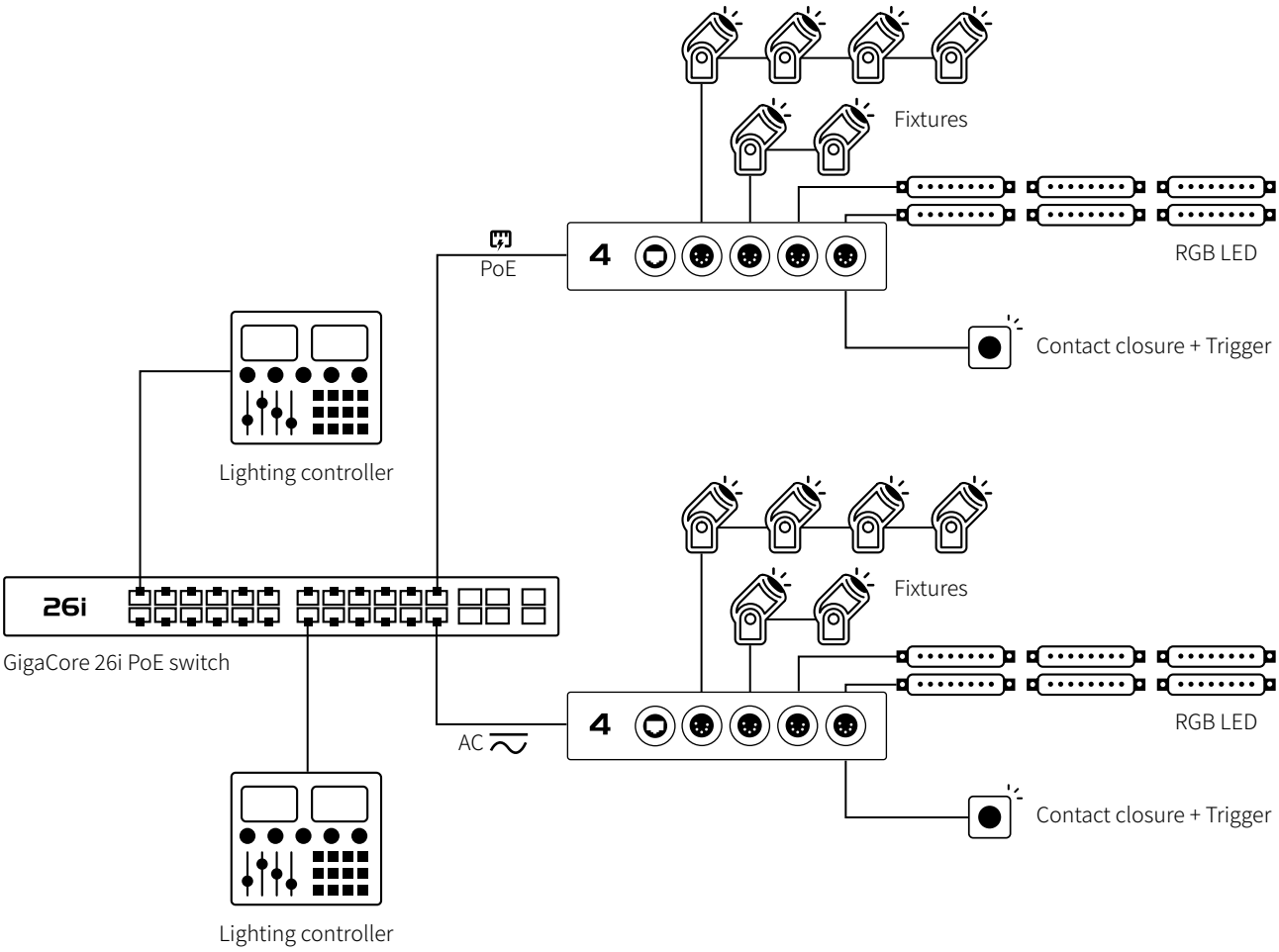
Luminode 4 with its 2 Ethercon connectors with 1Gbps capacity and an integrated switch is ready for future ethernet-only based lighting networks.
Luminode 4 features group (VLAN) technology, which allows you to arrive at the Node with an ISL connection, connect the node to the lighting group and use the second Ethernet port for other purposes in another group (for example video control, Dante audio, …).

Applications:

- Touring & Live entertainment
- Studio's
- Cruise ships / Yachts
- Theaters
- Arena / stadium lighting
- Architainment lighting
- Theme parks
- Campuses
- Houses of worship
- ...

ORDERING INFORMATION	
Product name:	Part numbers:
LumiNode 4	LU 01 00071

2. APPLICATION DIAGRAM

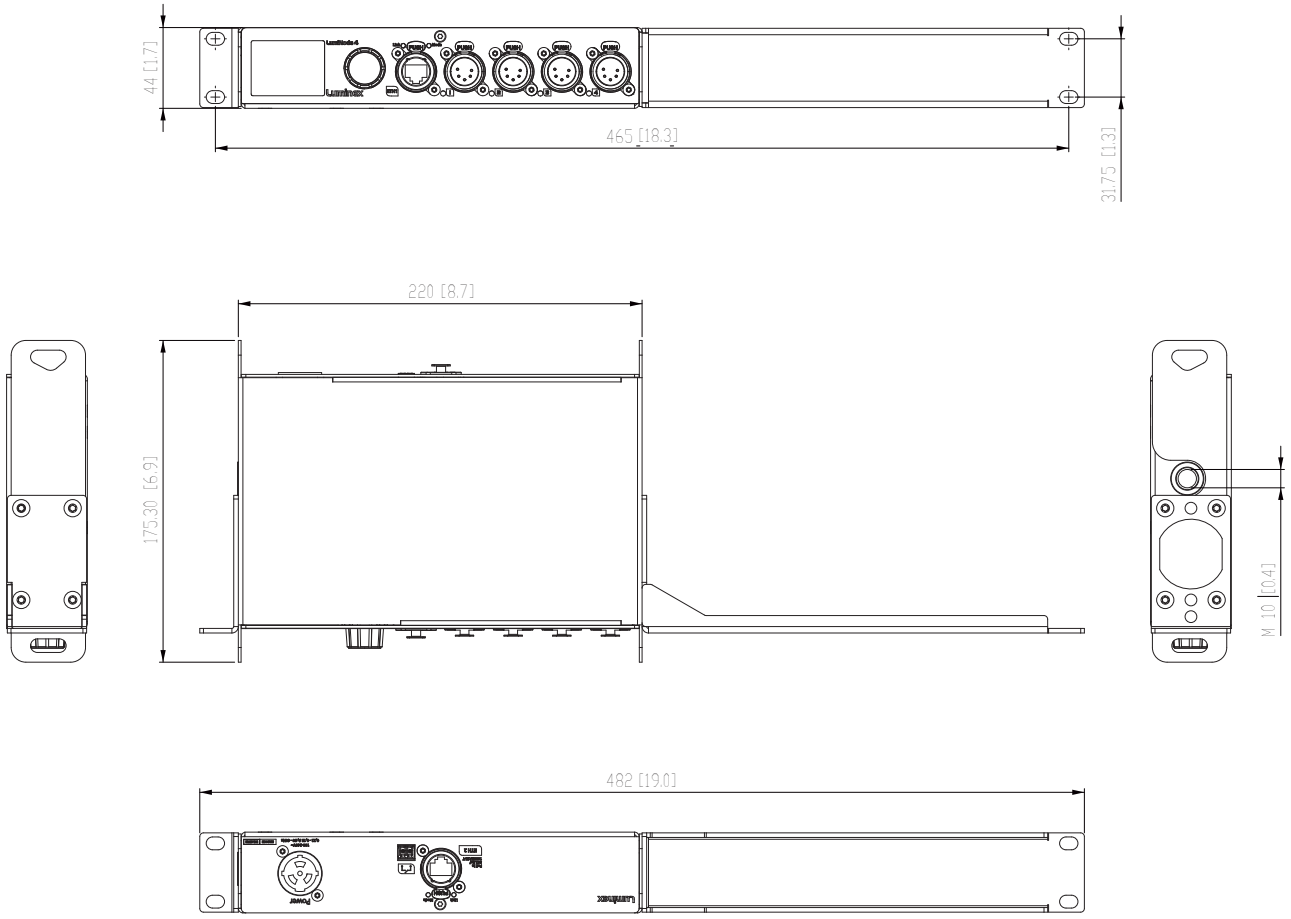


3. TECHNICAL SPECIFICATIONS

CONNECTIVITY	
DMX/RDM	4x shielded & gold plated Neutrik 5-pin XLR (female)
Network	1x gigabit shielded Neutrik etherCON connector Front panel 1x gigabit RJ45 connector Rear panel PoE-802.3af
Contact Closure	1x 2-pin pluggable terminal block
Power	1x Neutrik powerCON TRUE1 Ethernet (PoE 802.3af class 0)
DMX FEATURES	
Supported protocols	DMX512 (1986 & 1990) DMX512-A RDM ANSI E1.20-2010
DMX port direction	Input or output (configurable)
DMX port isolation	Optical and galvanic isolation per port
DMX timing	Framerate: 10-40fps Break: 176-352µs
ETHERNET FEATURES	
Supported protocols	Art-Net™ (1-4) sACN ANSI E1.31-2018 RTTrPL (BlackTraX) KiNET v1, v2
Port speed	10/100/1000Mbps
Port sensing	Auto-negotiation MDI / MDIX
Split management interface	Yes
Groups (VLAN) support	No
ADDITIONAL FEATURES	
Processing engine	6
Merging	Yes (HTP, LTP, X-Fade, Backup, Switch, Custom)
Softpatch	Yes
Master/Limit	Yes
Trigger system	Yes
Reroute function	Yes
Profile manager	Yes
Snapshot	Yes
Monitoring Software	LumiNet Monitor, Araneo
DMX redundancy	Yes
STATUS REPORTING	
Display & jog	Yes
Ethernet port connection	link/activity LED Group RGB LED
DMX port	DMX/RDM RGB LED
POWER / PoE	
Power input	100-240VAC 50-60Hz PoE-802.3af (Class 0)
Power consumption	Max 13W
Power redundancy	Yes

MANAGEMENT	
Configuration	Built in Web server Documented Web API Colour display & Jog
ENVIRONMENTAL	
Operating temperature	0 to +50°C
Storage temperature	-10 to +70°C
Humidity(non condensing)	5 to 95% RH
MECHANICAL	
Enclosure	Robust all metal housing
Dimensions (W x D x H)	220 x 175,3 x 44 mm
Weight	1,42 kg
Mounting type	Rack mount, Truss mount
Packaging	420 x 272 x 80 mm
APPROVALS	
Electromagnetic emissions and immunity	EN55032 class A EN55035 EN61000-3-2 EN61000-3-3 EN61000-4-2 EN61000-4-4 EN61000-4-5 EN61000-4-6 EN61000-4-8 EN61000-4-11 FCC Part 15 CFR 47 class A ICES-003 Issue 6
Safety approvals	IEC 62368-1 EN 62368-1 UL 62368-1 CAN/CSA-C22.2 No. 62368-1 CE
Certificates	cSGSus Mark CE CB certificate
GREEN	
	RoHS REACH

LUMINODE 4



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