DiGidot Power Node

Specification sheet

DiGidot
PUSHING CONTROL BOUNDARIES

PUSHING CONTROL BOUNDARIES

86-260 VAC | 12-48 VDC | SPI | ARM | RoHS | CE | IP20 | 5 Warranty

ART NET | sACN | 8-16 BIT | TRIGGERS | RECORD | SCENES

The DiGidot Power Node is a cutting-edge, 19-inch rack-mountable unit designed to empower your lighting setup like never before. With the capability to deliver up to 1200W of power and accommodate 24 universes of DiGidot Controller Extended data features, it's a game-changer in the industry cutting installation time by up to 80%!
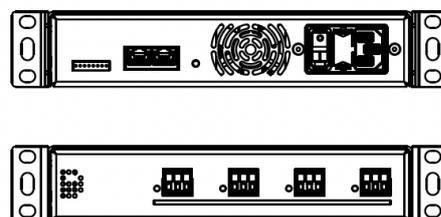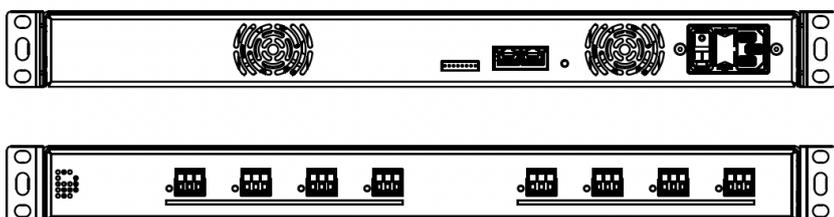
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Description

The DiGidot Power Node is the ultimate all-in-one solution designed to save time, enhance efficiency, and power up to 24 universes effortlessly thanks to its exceptional ease of installation. Where you would normally require separate components like a controller, power supply, and cabling, the Power Node combines everything into one compact and efficient system. Available in two versions – the U12X and U24X – the Power Node series provides flexible solutions for both compact and large-scale lighting installations.

The Power Node U24X supports up to 24 universes, while the Power Node U12X handles up to 12 universes. With versatile DC power supply selections of 12, 24, and 48 V, it is well-suited for a broad spectrum of LED applications – from subtle accent lighting to large-scale installations. Additionally, the wide input voltage range of 100 V to 260 VAC ensures compatibility with various power standards worldwide. With 600W per power supply (and up to 1200W with the Power Node U24X), the Power Node delivers reliable, high-capacity performance, perfect for demanding lighting setups. Real-time output monitoring and fully configurable electronic fuses, managed through the user friendly DiGidot interface, offer maximum control, safety, and efficiency. Individual outputs can be toggled to minimize energy usage during standby or blackout modes, helping users reduce power consumption and extend system longevity. This makes the Power Node not only powerful, but also smart, sustainable, and future proof.
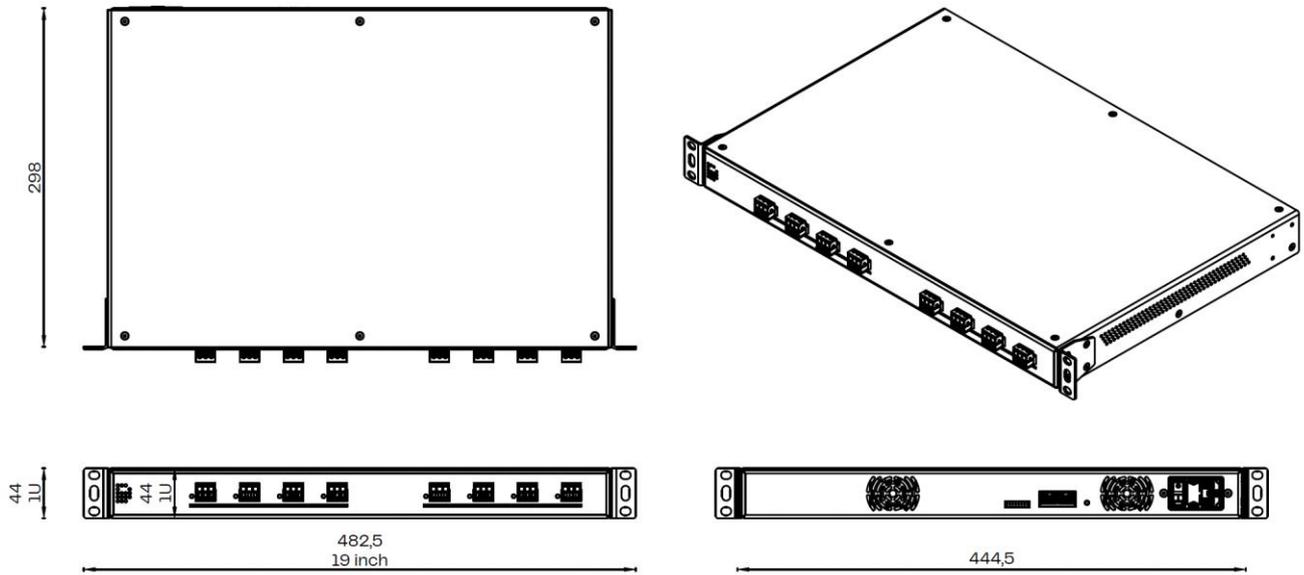
Features

- **Built-in e-fuse protection** – Ensures safe, intelligent overload handling per output.

- **600 or 1200 W total power** – Scales easily to meet project demands.

- **Available in 12, 24, or 48 V DC** – For optimal compatibility.

- **4 or 8 individually switchable outputs** – Manage energy use per output.

- **Real-time monitoring ready** – live voltage and current tracking via the DiGidot interface for instant diagnostics[1]

- **Inrush current limiter** – Prevents tripping during power-up and protects connected devices.

- **Fast rack installation** – designed for effortless mounting and maintenance, with included brackets that can rotate 90° for flexible positioning.

- **12 or 24 universes** – Powerful control for complex lighting systems.

- **Triggers** - Includes a built-in trigger interface for a wide range of automation and system integration applications.
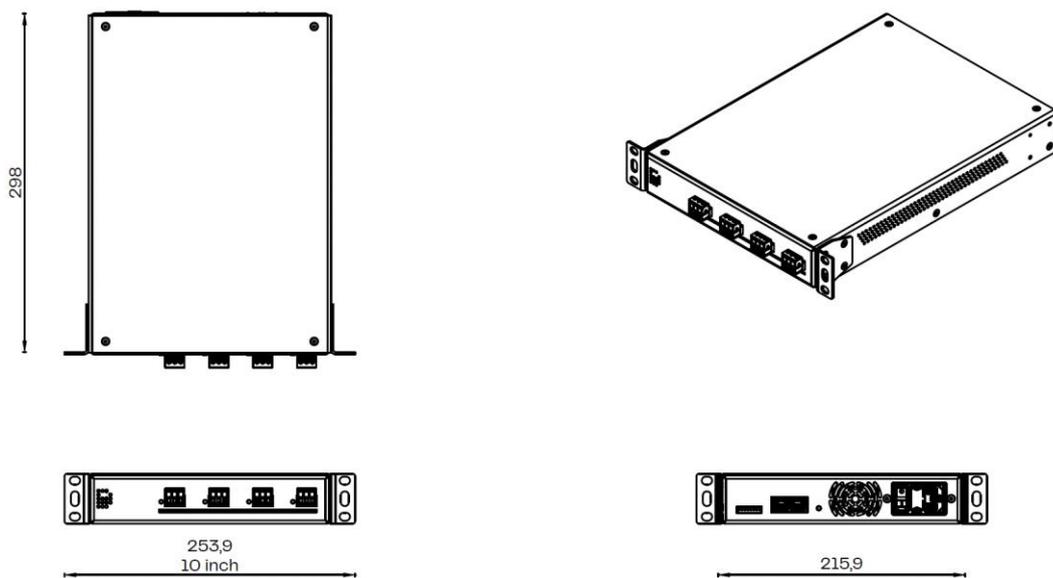
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[1] Feature to be enable with future DiGidot Controller update
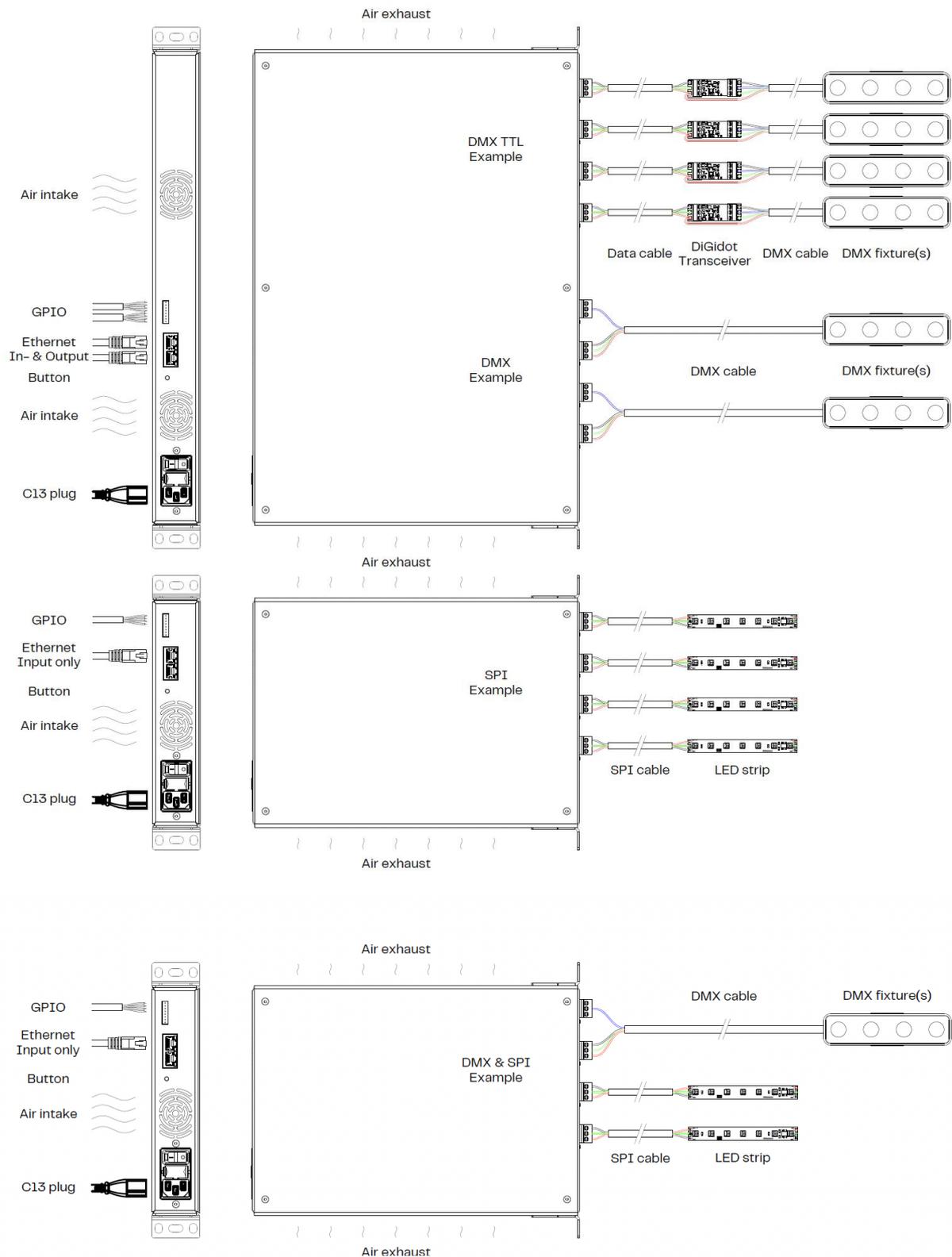
Technical drawings Power Node U12X and U24X
U24X

298

44 1U

44 1U

482,5
19 inch

444,5

U12X

298

253,9
10 inch

215,9

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Wiring diagrams drawings Power Node U12X and U24X

Air exhaust

Air intake

DMX TTL
Example

Data cable | DiGidot Transceiver | DMX cable | DMX fixture(s)

GPIO

Ethernet
In- & Output

Button

DMX
Example

DMX cable | DMX fixture(s)

Air intake

C13 plug

Air exhaust

GPIO

Ethernet
Input only

Button

SPI
Example

Air intake

SPI cable | LED strip

C13 plug

Air exhaust

Air exhaust

GPIO

DMX cable | DMX fixture(s)

Ethernet
Input only

Button

DMX & SPI
Example

Air intake

SPI cable | LED strip

C13 plug

Air exhaust

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Specifications

Electrical

|	
Input Voltage	86-260 VAC
Frequency	50-60 Hz
Max. Power Consumption	U12x 700 W, U24x 1300 W

Mechanical

Housing Material	ALMg3 EN AW-5753 H111
Dimensions	U12: 298 x 212/254 x 44 mm | 298 x 440,5/482,5 x 44 mm
Net Device Weight	U12X: 1,76 kg | 3,87 lbs. U24X: 3,28 kg | 7,23 lbs.
Package Weight	U12X: 2,54 kg | 5,60 lbs. U24X: 4,06 kg | 8,95 lbs.
Mounting	Included brackets that can rotate 90° for flexible positioning

Environmental

Operation Temperature (Tc)	0 to 50°C | 32 to 113 °F ([1] see power derating curve in the graph below.)
Storage Temperature	-20 to 50 °C | -4 to 122 °F
Operating Relative Humidity	90% (indoor use only)

Available Power vs Ambient Temperature
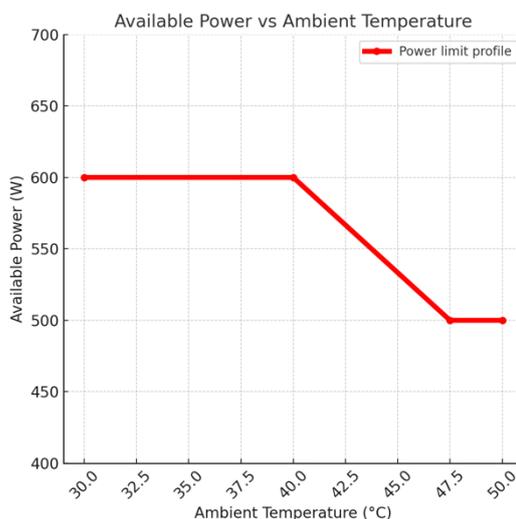
Protection

IP Rating	IP20
DC	Inrush limiter, over- and undervoltage protection, reverse polarity protection

Control

Supported Protocols	SPI, DMX TTL, ArtNet, sACN
Input	GPIO triggers

Connectivity

Max. Power Wiring	2,5 mm2 | 12 AWG
Max. Data Wiring	0,2 mm2 | 26 AWG

Quality

Warranty	5 years
Compliances	CE, RoHS, pending ETL (expected 2026)
Applied standards	EN60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013, IEC60950-1/EN60950-1, EN61006-6-3, EN55032

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Safety Instructions

Before installing DiGidot products it's important to take notice of following safety and installation instructions.

> Before installation and use of this product, read this specification sheet carefully.

> Make sure that these instructions are handed over to the end-user and those responsible for installation, use and maintenance.

> Local electrical and safety rules and guidelines always overrule this manual.

> Installation should only be carried out by a professional and certified installer that is qualified to work on the product.

> Do not conduct any repairs of the device (there are no user serviceable parts inside). Any unapproved repairs and/or product modifications will void product warranty. DiGidot Technologies B.V. cannot be held liable for any consequences.

> Repairs of this product may only be carried out by the manufacturer DiGidot Technologies B.V.

> Repairs and maintenance on the installation may only be carried out by qualified technicians.

> Always disconnect the mains power when working on a high voltage electric installation, not doing so may result in product damage and/or personal injuries.

> Do not connect or modify this product other than described in this manual.

> Never use a product that is damaged or does not work correctly or when the product starts to smoke, or when a crackling/sizzling noise is audible. If this is the case in any way, disconnect power and please contact your supplier immediately.

> The only way to power off this product is to disconnect it from the power source.

> The product is designed for indoor use (dry locations) only.

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Packaging, Orderable Information

Content

> 1x DiGidot Power Node U12X or U24X

> 4x or 8x Three pins push-in terminal

> 1x Power Cord

> 1x Screwdriver tool

> 1x Spare fuse

NOTE
We put great care in our products and have a highquality control standard. Nonetheless we advise to double check for missing or damaged items.

In case of any missing or damaged items, please contact your supplier immediately.
Never use damaged products!

Order Information

Product Name	Article nr.	EAN Code
Combinations		
DiGidot Power Node U12X – 12V	2040511	8720168565945
DiGidot Power Node U12X – 24V	2040512	8720168565952
DiGidot Power Node U12X – 48V	2040513	8720168565969
DiGidot Power Node U24X – 12V	2040521	8720168565976
DiGidot Power Node U24X – 24V	2040522	8720168565983
DiGidot Power Node U24X – 48V	2040523	8720168565990

General Information

Online Resources

Before for technical specifications, latest documentation, manuals, product information and further support please visit www.digidot.eu.

Remarks

We have put great care in writing this manual. However, in case you encounter any discrepancies or unclarities, please contact us.

Warranty

This product is covered by a carry-in manufacturer's warranty of 5 years which covers any design faults, production faults and component failures.
Warranty voids if the product was installed or used incorrectly or not in accordance with this manual, and/or if the product was damaged due to external factors,
modified or electrically overloaded. Warranty conditions of DiGidot Technologies B.V. apply. Warranty claims have to be issued by email: support@digidot.eu.

Disposal and recycling

This product is marked with the crossed-out wheeled bin symbol to indicate that it must not be disposed of with other household waste. Instead, it shall be collected separately for recycling, reuse or proper disposal as required by Directive 2012/19/EU on Waste Electrical and Electronic Equipment (WEEE). Please contact your local collection center or authorized dealer for proper disposal options.

The contained battery must also be removed and disposed of separately according to local regulations and the European Battery Regulation (EU) 2023/1542.

Feedback

Tell us all about your experience with DiGidot! The continuous development of the DiGidot control platform is only possible thanks to feedback from our users. If you have any suggestions, please contact us by email: info@digidot.eu.

Copyright

Disclaimer

DiGidot Technologies B.V. cannot be held liable for improper handling, product installation, usage or storage. DiGidot Technologies B.V. explicitly rejects any form of liability claims in advance, whether it concerns direct or indirect disadvantages, damage, injuries, loss of income or other financial, materialistic or personal consequences that are directly or indirectly caused by use of this product or it's owner or user. Any form of unintended or misuse of this information and/or DiGidot products indemnifies DiGidot Technologies B.V. from liability and warranty obligations.

DiGidot

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