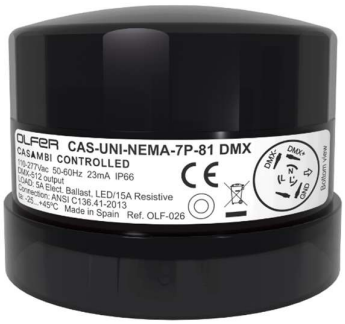
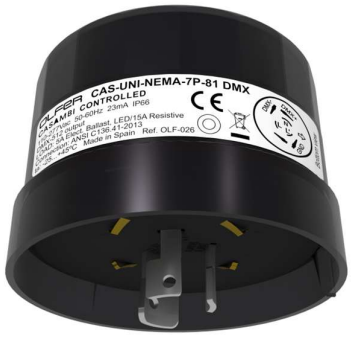




CASAMBI INSIDE

CE RoHS

Features

- Casambi to DMX control device for street and arquitectural lighting
- Tool-less twist and lock mounting into NEMA 7 pin socket (ANSI 136.41)
- BLE5 Compatible with Casambi Long range networks.
- Starting DMX channel/address can be selected
- Copy slot function allows to control up to 512 channels (1 universe)
- Several Casambi fixture profiles available

Description

CAS-UNI-NEMA-7P-81-DMX control unit enables easy autonomous control and dimming of DMX devices (drivers, light fixtures, etc.) There is no need to use hubs, master devices or complex computer software programs.

Setup and communication with other control devices is done using Bluetooth low Energy (BLE).

Configuration and control can be done from a mobile phone or tablet using the free CASAMBI APP.

Main use is control of outdoor DMX luminaries in lighting applications. It is provided with an IP66 UV resistant enclosure. Hydrophobic vent is incorporated to prevent condensation.

Range between controllers in outdoors with direct line of sight and without obstacles is up to 60m in Balanced BLE4 type nets, and can be over 100m in BLE5 Long range type nets.

Up to 250 controllers (or other Casambi devices) can be supported per network. Depending on the network type (communication speed) and the required data traffic this number may have to be reduced to ensure a fluent behaviour. One installation can have unlimited number of networks which can be grouped together in one Site. Through the site we can control different networks simultaneously (for this each network must have access to Internet through a gateway and have gateway function enabled).

Diverse operating modes are possible (on/off, dimming 0-100%, RGBW, TW Colour control, Dim to warm, circadian control, etc.).

Minimum Casambi transition time between scenes or animations is 1 second.

CAS-UNI-NEMA-7P-81-DMX is compatible with any other devices from other manufacturers which also incorporate CASAMBI inside, and CASAMBI Ready products such as luminaries, presence sensors, relays, actuators, push buttons, etc.

▪ Technical data

CAS-UNI-NEMA-7P-81-DMX	
Nominal line voltage	110-277Vac
Input voltage range	85-305Vac
Frequency	47-60Hz
Power consumption standby	<0,8W@230Vac (DMX bus disconnected)
Power consumption communicating	<1W @230Vac (DMX bus connected)
Output control interface	3 wire isolated DMX-512
L' output current	15A max. Input bridged, no relay.
Dimming range	0-100%
RF communication interface	Bluetooth 4.0 or 5.0 Low energy (BLE)
RF communication protocol	Casambi
RF spectrum	2402–2483 MHz
RF network	Self-healing, frequency-hopping, spread spectrum mesh technology
Maximum transmission power	+8 dBm
Wireless class	Class 2
Data security	AES128 bit encryption + elliptical cryptography
Firmware update	OTA (Over the air)
Time/date update	Internal counter. Updatable from APP or by use of external timer after power disconnection or through Casambi gateway
Protections	Line surge overvoltage.
Operating temperature range	-25° to +45°C
Dimensions	Diameter 88mm. Height 63mm
Weight	150gr.
Enclosure material	PC with anti-UV treatment
Enclosure isolation type	Reinforced isolation ⧈
IP	66
IK	09
Connector	NEMA 7P (ANSI C136.41)
Standards	EN 61347-1:2016, EN 61347-2-11:2003, EN 55015:2013, EN 61547:2011, EN 61000-3-2, EN 61000-3-3, EN 301489-1, EN 301489-17.
Directives	(LVD) 2014/35/UE, (EMC) 2014/30/UE, (RED) 2014/53/UE, (RoHS) 2011/65/UE, (REACH) 1907/2006.

▪ Fixture profiles

PROFILE	DESCRIPTION
4 Dim	4 Sliders for individual channels. 4 DMX Channels.
8 Dim	8 Sliders for individual channels. 8 DMX Channels.
12 Dim EVO	12 Sliders for individual channels. 12 DMX Channels. only compatible with Evolution networks.
2 CCT	Tunable white. Slider for main dimmer. Slider Up/Down for CCT control. 2 DMX Channels.
CCT (Warm/Cool)	Tunable white. 1500K-7900K. 2 DMX Channels.
DTW	Tunable white "Dim to warm" type. 2 DMX Channels.
RGB	RGB with colour pallette. 3 DMX Channels.
RGBW	RGBW with colour pallette. Slider for white. 4 DMX Channels.
RGB-TW	RGB with tunable white. The CCT slider simulates warm or cool using the mix of the first three channels (RGB). 3 DMX Channels.
RGB/White*	RGBW with colour pallette. White/Colour balance slider. 4 DMX Channels.
RGBW Sliders	RGBW with individual sliders for each channel/colour. 4 DMX channels.
Elements	It does not implement any control mode. Created for developers to manage the Casambi network through the EXTIF interface. Not usable for the general public.

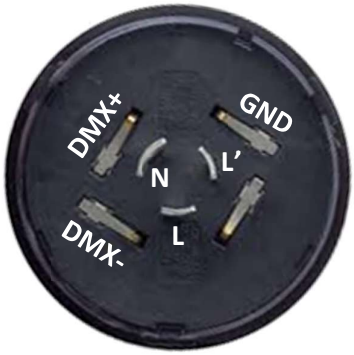
*Factory default profile

▪ DMX Parameters (can be selected in Casambi App):

PARAMETERS	
DMX Start Address ≥1	Starting DMX Channel/address. It must match that of the device to be controlled.
DMX Frame length ≤512	Sets the consecutive DMX Channels range which will be used.
DMX Copy slot count >0	Allows copying the information contained in a block of X Channels, starting with the "DMX start address", into consecutive channels. The value of "copy slot count" defines the number of X channels to be copied. The information in the block will be copied and transmitted by other consecutive channels within the range defined by the "DMX frame length". In this way it is possible to replicate the information of the first channels into other channels. Some DMX controlled LED strips use many DMX channels and require this function to be used in order to control the complete LED strip.

Example: if we have 5 RGBW DMX devices and we want to control them with the same colour through Casambi we could set as follows: Address the devices as 1, 5, 9, 13, 17 (each device uses 4 consecutive channels to control individually the RGBW outputs). Then we can set DMX Start Address to 1, DMX Frame length to 20, and DMX Copy slot count to 4. The DMX messages sent to the first 4 channels will be replicated into the consecutive blocks of 4 channels. The last channel that will be used for transmission is number 20.

Wiring diagram



BOTTOM VIEW
Note: L input and L' output are internally shorted together inside CAS-UNI-NEMA-DMX