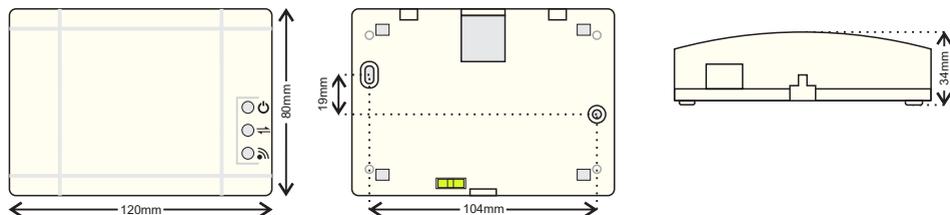


Network Master ETH/WiFi T2

Dimensional drawings:

The **138091** Wireless Network Master ETH/WiFi T2 is a master device (Gateway) with Ethernet & Wi-Fi connectivity, for TELA2 Wireless Lighting system.

The **138091** is capable of monitoring up to 250 wireless devices (consisted of emergency luminaires, extenders, I/O units, other), forming a wireless network.

The available connection methods to the local network are:

- Ethernet (wired)
- Wi-Fi - WPA2/PSK
- Wi-Fi - WPS

The device supports both Dynamic (DHCP) and Static IPv4 addressing options. The communication protocol is TCP with TLS/SSL security layer.

Installation:

Use the mounting holes to install the device to a wall surface. Avoid metallic surfaces or glass. Use the spirit level (bubble) for horizontal alignment.

The **138091** must be supplied with a permanent 220–240V AC/50–60Hz power supply through a circuit breaker equivalent to the total load of the emergency lighting equipment. The device does not implement backup power supply in mains interruption; therefore, if the monitoring system is required to be active during mains interruption (emergency), the device must be supplied via a UPS power line.

If Ethernet connectivity is going to be used, the device must be placed close to an Ethernet network source (socket/switch/router).

If Wi-Fi connectivity is going to be used, the device must be placed within range of a present Wi-Fi network. Use a laptop or a smartphone to ensure signal level before installing.

The **138091** must be placed in a central point of the entire Wireless Lighting installation area in order to achieve multiple available routes for the data transmitted (star connection). The wireless network is “mesh” type, meaning that each wireless device is also a repeater. The recommended number of wireless devices directly connected into the Gateway is 5 to 10. Direct connection is achieved when a wireless device is located within Gateway wireless range (20 to 25 meters – building interior).

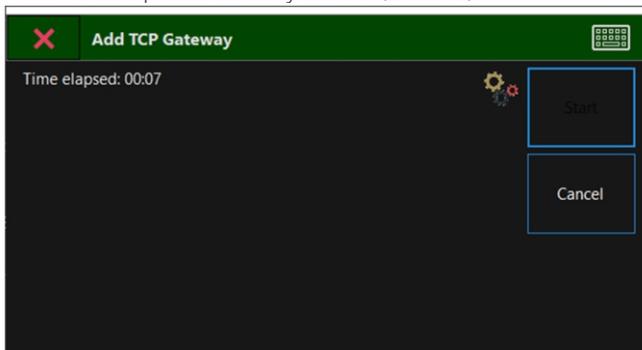
Commissioning:

Use one of the available connection methods in order to establish communication between the 138091 and the TELA2 software, depending to your application.

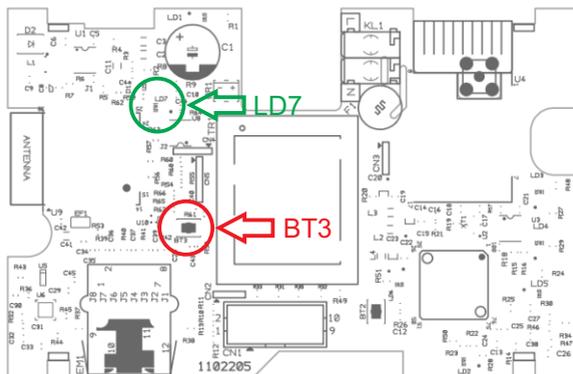
To proceed with configurations, a device with Wi-Fi connectivity and DHCP (i.e. a laptop PC, a smartphone or tablet) is required.

STEP 1 – Enable Gateway invitation via TELA2 software.

First, via the TELA2 software user interface, go to “Installation > Add Gateway” and click “Start”. The software will enter a mode to accept new Gateway devices (138091).

**STEP 2 – Configure the Gateway to connect to local network and TELA2.**

While the device is activated, open the front cover and press the “BT3” button located in the left part, inside of the device, for 3 seconds. Avoid touching other areas of the device electronics. The “LD7” green LED will start blinking 2 times per second, indicating the Wi-Fi Access Point ready.



“BT3” button and “LD7” LED position

Use your Wi-Fi device (laptop, smartphone) in order to connect to the Wi-Fi Access Point with the SSID (name):

“WIRELESS_LIGHTING_GATEWAY”

Use the following password when asked:

“WIRELESSGW”

Open a web browser via your Wi-Fi device and in the browser's URL area type the address "192.168.1.1" and then press Enter. The following webpage appears:

192.168.1.1

Use your preferred connection method:

1 – For Ethernet connectivity:

In order to connect the 138091 Wireless Network Master /WiFi T2 with the local network, using Ethernet connectivity, the device must be connected to the local network using a network cable with RJ45 male connector, to the corresponding RJ45 port on the bottom of the device.

In the "IP static" field write the static IPv4 address for this Gateway device, or leave empty for dynamic addressing (DHCP option).

Next, write the IPv4 address of the Master PC (that is hosting the TELA2 "WelReceiver" service), in the "IP Master" field. This field is required. Leave the rest of the fields empty.

Then, select the "Ethernet" option below and click "Submit" to apply changes.

2 – For Wi-Fi (WPA2/PSK) connectivity:

In order to connect the 138091 Wireless Network Master ETH/WiFi T2 with the local network, using Wi-Fi connectivity, a Wi-Fi network with 802.11 b/g/n protocols and WPA2/PSK security must be active and within range. The Gateway will join the Wi-Fi network as a client.

In the "WiFi SSID" field write the SSID (name) of the Wi-Fi network that the Gateway will join. The name is case sensitive.

In the "WiFi PSWD" field write the WPA2/PSK password of the Wi-Fi network.

In the "IP static" field write the static IPv4 address for this Gateway device, or leave empty for dynamic addressing (DHCP option).

Next, write the IPv4 address of the Master PC (that is hosting the TELA2 "WelReceiver" service), in the "IP Master" field. This field is required.

Then, select the "WiFi" option below and click "Submit" to apply changes.

3 – For Wi-Fi (WPS) connectivity:

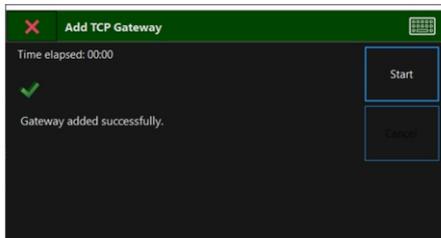
In order to connect the 138091 Wireless Network Master ETH/WiFi T2 with the local network, using Wi-Fi connectivity, a Wi-Fi network with 802.11 b/g/n protocols and WPS must be active and within range (use your laptop or smartphone to ensure signal level). The Gateway will join the Wi-Fi network as a client.

Next, write the IPv4 address of the Master PC (that is hosting the TELA2 "WelReceiver" service), in the "IP Master" field. This field is required.

Then, select the "WPS" option below and click "Submit" to apply changes. Now, on your Wi-Fi router, click the "WPS" button to enable WPS connection.

If your connection method succeeds, the "LD7" green LED will start blinking 1 time per second, indicating successful connection.

On the TELA2 software "Add Gateway" window, you will see a confirmation message "Gateway added successfully". Close the window and proceed into auto-detecting or easy-commissioning procedure.



LED indications

LD1 (Green)	Interior	Power supply active
LD2 (Green)	Interior	Data buffer traffic
LD3 (Green)	Front	Power ON - running state
LD4 (Yellow)	Front	Wireless Lighting - Data Rx
LD5 (Yellow)	Front	Wireless Lighting - Data Tx (beacon)
LD7 (Green)	Interior	WiFi / Ethernet connection indicator <ul style="list-style-type: none"> • ON - Disconnected • 1 flash / second - Connected • 2 flash / second - Access Point Active

Button functionality

BT2 (Right)	Short press (less than 2 seconds)	Send Gateway status to TELA2
	Long press (from 2 to 10 seconds)	Reset Device
	Prolonged press (10 seconds or more)	Reset Wireless parameters to factory defaults (SID, RF Channel, Nkey)
BT3 (Left)	Long press (more than 2 seconds)	Initiate Wi-Fi Access Point for configuration (via webpage)

Technical description	138091 Wireless Network Master ETH/WIFI T2
Operating voltage	220 - 240V AC / 50-60Hz
Power consumption	2VA
IP Rating	IP20
Ambient temperature range	5 to 40 °C
Wi-Fi protocol	802.11 b/g/n
Wi-Fi security	WPA2/PSK or WPS
Ethernet connectivity	10/100 Base-T Ethernet
Ethernet port	RJ45 (socket)
Max. wireless device capacity	250
Webpage address	192.168.1.1
Wi-Fi Access point SSID	WIRELESS_LIGHTING_GATEWAY
Wi-Fi Access point password	WIRELESSGW
Wireless Frequency range (868MHz)	868,150 - 868,450MHz
Wireless Tx power (868MHz)	11dBm
Default RF Channel	2 (868,150MHz)
Default SID (hexadecimal)	00000001
Default NKey (hexadecimal)	00000000



At the end of their useful life the packaging and product should be disposed of via a suitable recycling centre. Do not dispose of with your normal household waste. Do not burn.

