

we-ef

WE-EF LEUCHTEN

**Eco Step Dim[®] Motion
Gateway
Manual
2019**



The Gateway is the intelligent data bridge between the cloud and the luminaires. All data is communicated via a secured protocol.

The Gateway is the linking device that makes it possible to fully benefit from connected lighting. Assisted by the Gateway, information from each individual luminaire is wirelessly collected and sent to the cloud-based server via a secured protocol and a mobile network.

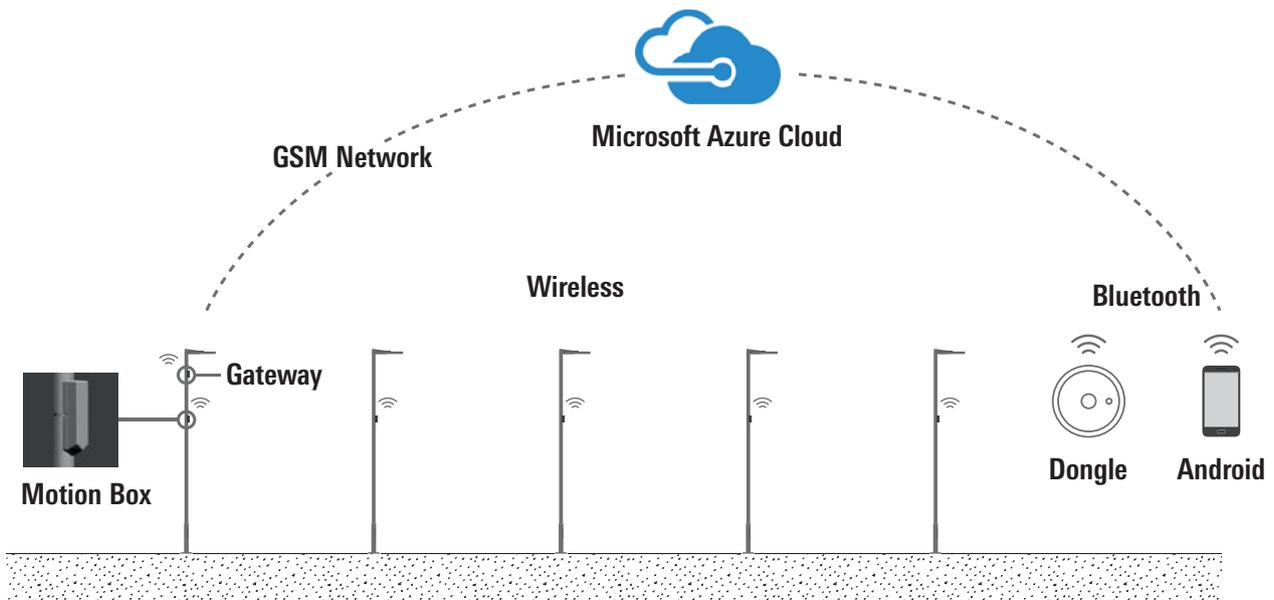
The key data of the luminaire's performance becomes accessible through the web-based platform (weefdashboard.com). The platform's intuitive interface allows easy management.

The device itself is compact, and specially designed for pole (optional mounting kit) or cabinet mounting. Its external dimensions are 147 x 56 x 28 mm.

The integrated SIM card allows roaming across multiple network operators. The operator with the best reception is automatically selected.

FEATURES

- Powering luminaires on and off
- Easy to install on cabinets or poles (optional mounting kit)
- Multiple wireless interfaces
- GSM roaming available for several carriers
- Automatic detection of faulty luminaires
- Wireless connection to Eco Step Dim® Motion System
- Ultra compact design
- Internal antenna
- Protection rating IP 67, IK08
- Buffering, collecting and uploading data into the cloud and back
- one digital output
- one digital monitoring input



SENSOR

With two sensors on each motion box, the luminaires are adaptive. The sensor detects motion and traffic when entering the sensor and luminaires field. This ensures light in front of the user at all time.

GATEWAY

The gateway is the intelligent data bridge between the cloud and the luminaires. All data is communicated via a secured protocol.

DONGLE

The dongle is a personal system key that makes it possible to control the luminaires, alter network settings, retrieve statistics etc., using the WE-EF Eco Step Dim® Motion App.

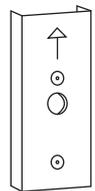
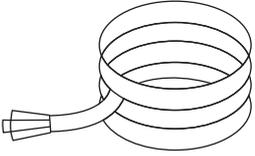
CLOUD SOLUTION

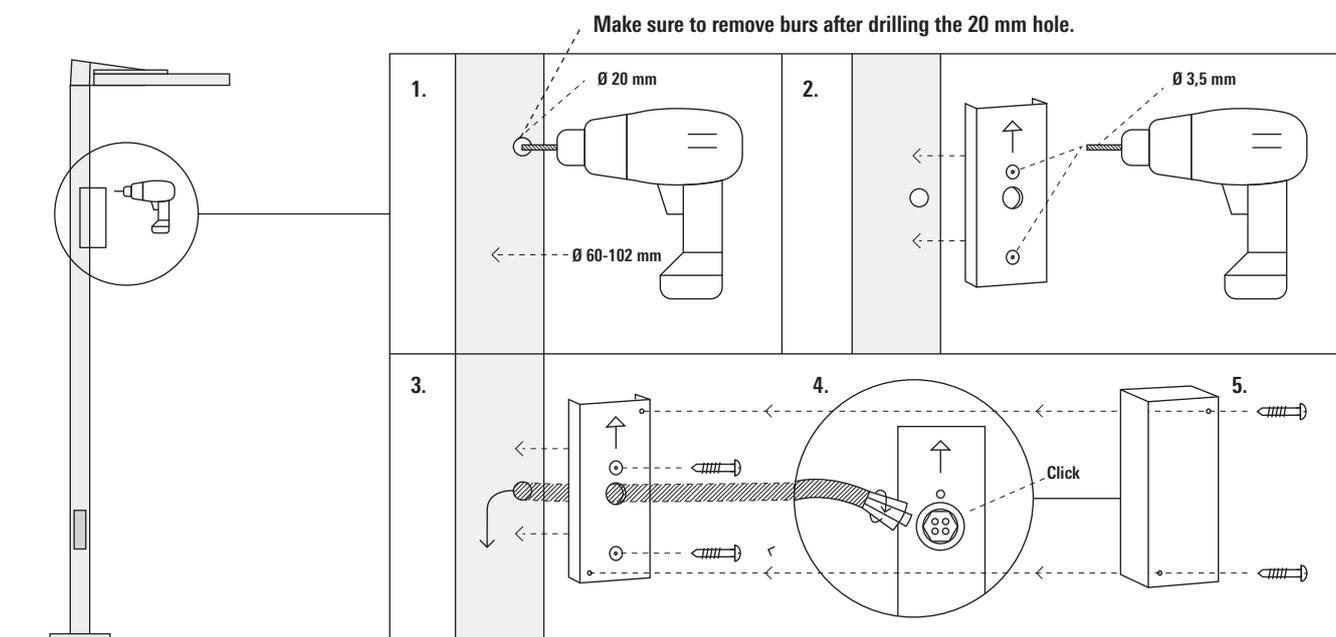
The key data on the luminaires performance is accessible through the cloud solution. The web platform's intuitive interface allows easy management. The dashboard provides monitoring, configuration and asset management.

APP

The app is for easy administration and allows adding and removing luminaires. It adds information such as saving GPS position, manufacturer, luminaire model etc., to weefdashboard.com.

Installation instruction pole (Pole mounting kit to be ordered separately, Part ID 400-0367)

<p>4 x Screws</p> 	<p>1 x Pole Adaptor</p> 	<p>1 x Pole Cable 8 m L = Brown N = Blue</p> 
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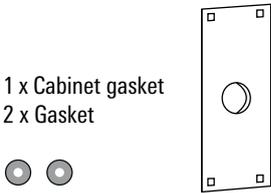
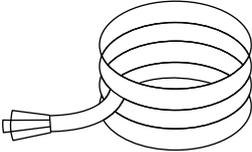


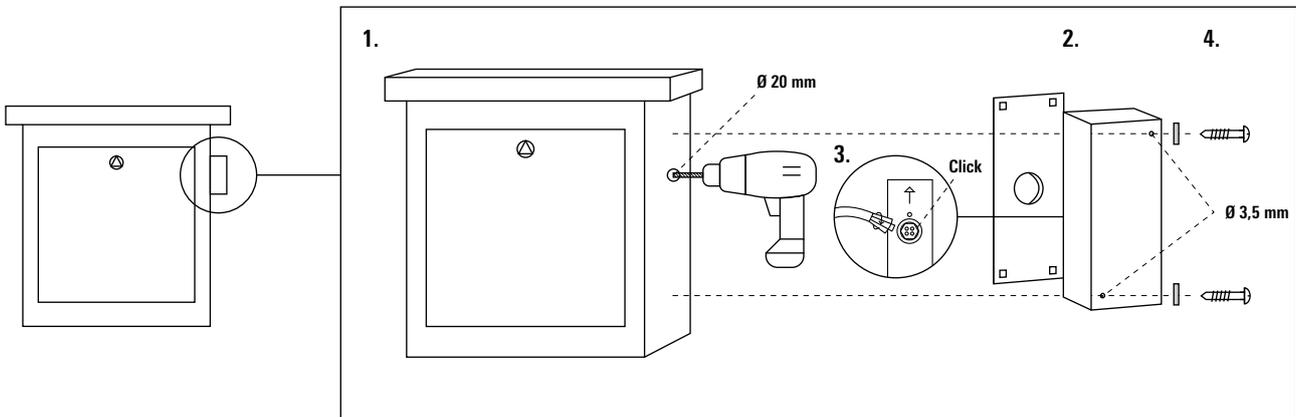
Warnings

- The Gateway should only be installed by a trained person.
- Avoid touching live parts.
- Do not use the Gateway with damaged housing and/or connectors.
- Do not use the Gateway with damaged wiring.
- Do not service the Gateway when the mains voltage is connected; this includes connecting or disconnecting a LED driver.
- The installer should consult with the pole manufacturer to ensure drilled holes are properly prepared.
- The gateway should be installed within <100 meters of the nearest luminaire that contains a WE-EF Eco Step Dim® Motion Box.
The Gateway will communicate wirelessly with the luminaires.

Technical specifications are subject to change.

Installation instruction power cabinet (mounting kit is included, Part ID 400-0366)

<p>1 x Cabinet gasket 2 x Gasket</p> 	<p>1 x Cabinet cable 1,5 m L = Brown N = Blue</p> 	<p>Please consult the cabinet manufacturer concerning proper mounting.</p>
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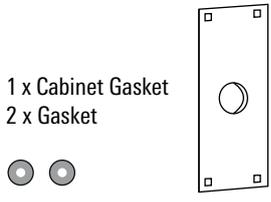
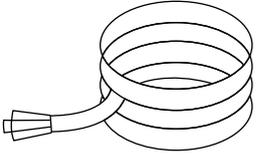


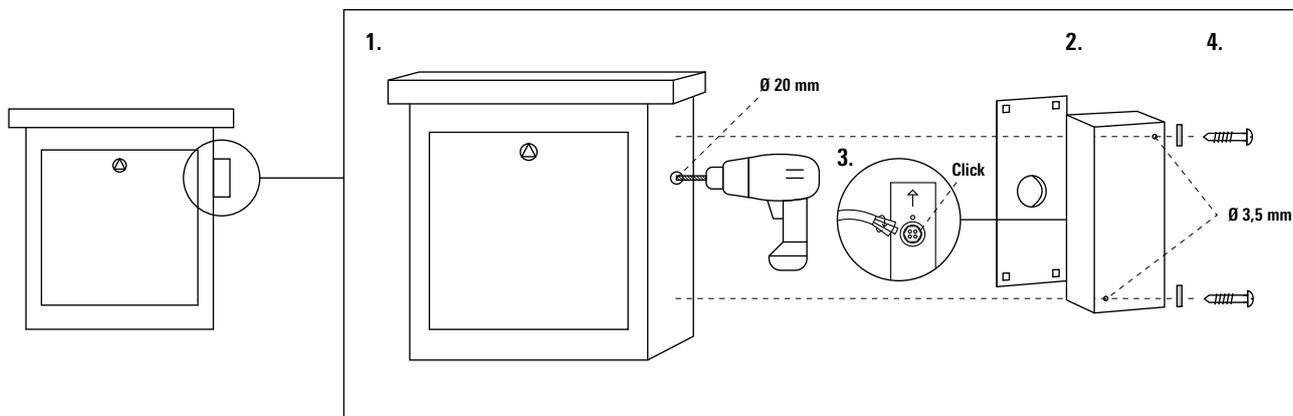
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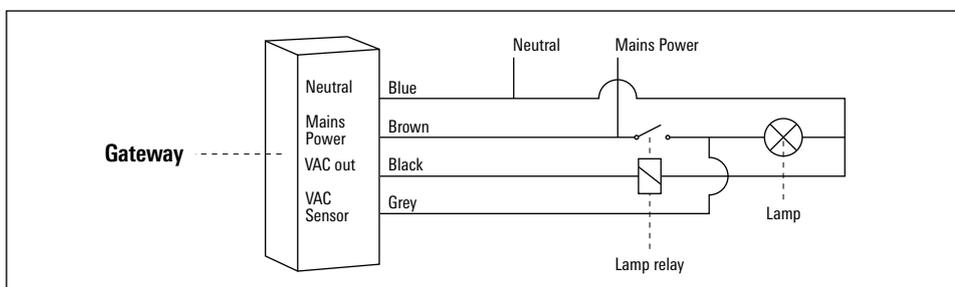
Technical specifications are subject to change.

Installation instruction power cabinet – 4 wire version (Power cabinet mounting kit to be ordered separately, Part ID 400-0365)

<p>1 x Cabinet Gasket 2 x Gasket</p> 	<p>1 x Pole Cable 5m (4 wires) Live = Brown Neutral = Blue Black = Mains Power Out (max. 0,16 A) Gray = Sensor</p> 	<p>Please consult the cabinet manufacturer concerning proper mounting.</p>
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Wiring Diagram



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- Do not use the Gateway with damaged housing and/or connectors.
- Do not use the Gateway with damaged wiring.
- Do not service the Gateway when the mains voltage is connected; this includes connecting or disconnecting a LED driver.
- The installer should consult with the pole manufacturer to ensure drilled holes are properly prepared.
- The gateway should be installed within <100 meters of the nearest luminaire that contains a WE-EF Eco Step Dim® Motion Box. The Gateway will communicate wirelessly with the luminaires.

Technical specifications are subject to change.

Electrical characteristics

Specification item	Value	Unit	Condition
Universal input voltage range	220-240	V _{AC}	
Rated Input frequency	47-63	Hz	
Power consumption	<3	W	
Maximum input current	1,1	A	@output signal loading maximum
230V input signal loading (L)*	2	mA	Maximum
230V output signal loading (L)*	1	A _{RMS}	Maximum.
2A PTC resettable fuse			

* Special cable is needed to be able to use 230V signals. Please contact WE-EF for more information.

Wireless communication

Specification item	Value	Unit	Condition
Number of control units	500	piece	
Frequency	868	MHz	
Standard	802.15.4		IEEE
Protocol	6 LowPAN		
Security	AES-128		
Recommended distance to nearest luminaire	<100	meters	
GSM/GPRS/EDGE/UMTS/HSDPA	900/1800/2100	MHz	2G/3G modem

Wire & Connections

Specification item	Value	Unit	Condition
Power Connector	7280-4PG-300		Conxall / Switchcraft
Cable type	H05VV-F		
Cable dimensions pole mounting	2 x 1,0	mm ²	Brown: Mains power in Blue: Neutral
Cable dimensions cabinet mounting	4 x 1,0	mm ²	Brown: Main power in Blue: Neutral Black: Control phase (max 0,16A) Grey: Digital monitoring input

Temperature & Humidity

Specification item	Value	Unit	Condition
Operational temperature	-25...+60	°C	Ambient
Storage temperature	-30...+80	°C	Ambient
Relative humidity	10-90	%	Non condensing. For use up to 2000m above sea level

Approvals

Directive	Standard
2014/53/EU	EN 301 489-1 V1.9.2
Radio Equipment Directive	EN 301 489-3 V1.6.1
	EN 301 489-7 V1.3.1
	EN 300 328 V2.1.1
	EN 301 511 V9.0.2
	EN 301 908-1 V5.2.1
	EN 301 908-2 V5.2.1
	EN 61547:2009
	EN 55015:2013
	EN 60950-1: 2006 +A1, A11, A2, A12
2011/65/EU	
RoHS Directive	EN 50581:2012

Purchasing data

Specification Item	Value
Eco Step Dim® Motion Gateway	
Part ID	400-0363
Gateway Pole Kit (2 core) *	1 Mast-Kabel 8 m
– Included items:	1 Mast-Adapter
Gateway Cabinet Kit (2 core) *	1 Cabinet cable 1,5 m
– Included items:	1 Cabinet rubber gasket
	4 screws
Gateway Cabinet Kit (4 core) *	1 Cabinet cable 1,5 m
– Included items:	1 Cabinet rubber gasket
	4 screws

* Select installation kit (pole kit or cabinet kit) when ordering.

Protection

Specification Item	Value	Unit	Condition
Required external fuse	<10	A	
Ingress protection (IP)	IP67		
Protection against mechanical impact (IK)	IK08		

Dimensions & Weight

Specification Item	Value	Unit	Condition
A	147	mm	Length
B	56	mm	Height
C	28	mm	Width
D	9	mm	Mounting hole distance on Gateway
E	15	mm	Mounting hole distance on Gateway
F	17	mm	Height for Pole adaptor
G	28	mm	Mounting hole distance for Pole adaptor
H	43	mm	Mounting hole distance for Pole adaptor
I	22	mm	Mounting hole distance for Pole adaptor
Weight	0,316*	kg	

*Without pole adaptor

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