

PHILIPS

CT Node



Specification Sheet

LLC7852, LLC7853

The CT Nodes LLC785x are intended for intelligent street lighting fixtures that contain a smart DALI driver and a Zhaga socket on the top. The socket enables easy installation of the CT Node, either in the factory or in the field.

CT Nodes are compatible both with the CityTouch and the Interact City remote street lighting management systems.

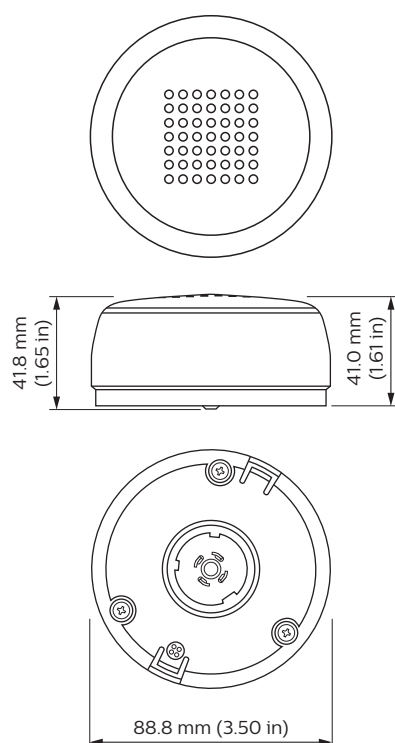


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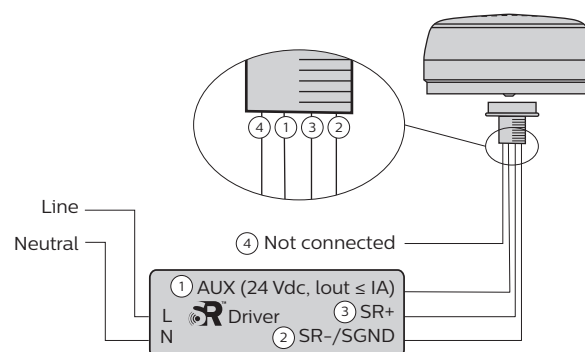
- The CT Node is a luminaire-based device that monitors and controls the LED driver - lamp combination.
- The CT Node LLC785x shall be used with a smart (SR or D4i certified) LED driver.
- The CT Node uses cellular communication to connect the street light with the CityTouch and Interact City lighting management system.
- The CT node controls the LED driver(s) via the intra-luminaire DALI bus.
- The CT node works with street lights from almost any manufacturer.
- The CT Node is available in two colors: Light Grey (LG) RAL7035 and Dark Grey (DG) RAL7043.

Dimensional drawings



LLC7852, LLC7853

Wiring diagram



The driver needs to have short protection, and at least basic insulation circuit from mains power supply.

Specifications

Product Dimensions

Height	41.8 mm (1.65 in)
Width	88.8 mm (3.46 in)
Net weight per piece	0.13 kg (0.29 lb)

Power Supply

Integrated bus power supply	Philips SR certified specification v2
	DALI Power-supply specifications (AUX power supply, DALI part 250)
Nominal power consumption	≤ 0.5 W
Maximum Power consumption	≤ 2 W

Control Interface

Intra-luminaire DALI bus	Philips SR certified specification v2
	DALI Data specifications (DALI part 251, 252, 253)
Load capacity	Maximum 4 LED drivers

Connectivity

GPRS/GSM	900/1800 MHz
LTE-M	Will be remotely enabled in future to connect to the LTE Cat M1 cellular network.
Local RF radio	Will be remotely enabled in future to create a local network for light on demand applications.
Bluetooth	Will be remotely enabled in future to support external sensors.

Features

Automatic positioning	CEP50 ≤ 2.5 m
Light control	Measurement range between 5 and 400 lux
	Remote configurable lux levels between 15 and 200 lux
	Default dusk/dawn level 20/20 lux
Unexpected power outage	Energy buffer

Environmental

Ambient temperature	-40 °C to 70 °C
T _{case} max	78 °C measured at T _{case} point
T _{case} life	45 °C measured at T _{case} point
Storage Temperature	-40 °C to 80 °C
Relative humidity	5% to 95% non-condensing

Lifetime

Lifetime	125,000 hours Measured temperature at T _{case} -point is T _{case} -life Maximum failures = 10%
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Surge immunity

Power supply	6KV Common Mode IEC61000-4-5, 2 Ohm, 1.2/50us, 8/20us
DALI	500V Differential Mode IEC61000-4-5, 40 Ohm, 1.2/50us, 8/20us

Declaration of Conformity regarding Radio Equipment Directive (RED), 2014/53EU

Safety	IEC/EN 61347-1, IEC/EN 61347-2-11 IEC/EN 62368-1
EMC	ETSI EN 301 489-1, ETSI EN 301 489-52, ETSI EN 301 489-19, ETSI EN 301 489-17, EN 55032, EN 55024, EN 55015, EN 61547
RF	ETSI EN 301 511, ETSI EN 303 413 ETSI EN 301 908-1, ETSI EN 301 908-13
RF exposure information	This device meets the EU requirements (2014/53/EU) on the limitation of exposure of the general public to electromagnetic fields by way of health protection. The device complies with RF specifications when the device used is at 321 mm from your body.

Certificates and Standards

Marking	CE, ENEC, CB
Ingress Protection	Suitable for IPX6 luminaires. The luminaire shall provide sealing of the ZHAGA compatible plug.
Mechanical impact protection	IK08
Mechanical interface	Zhaga book 18

Ordering Data

Type	Order code
LLC7852/00 CT NODE ZHAGA DC EU4VF LG	9137 010 57603
LLC7853/00 CT NODE ZHAGA DC EU4VF DG	9137 010 57703

Sustainability

RoHS Directive	2011/65/EU
Hazardous substances	RoHS Directive 2011/65/EU, as amended by Directive (EU) 2015/863 of March 2015
Chemical substances	REACH Directive 2006/1907/EC
Electronic waste	WEEE Directive 2002/96/EC



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