



Specification Sheet

LLC7815 CT node

The CT node is a luminaire-based control device that connects your street light to the Interact City lighting management system.

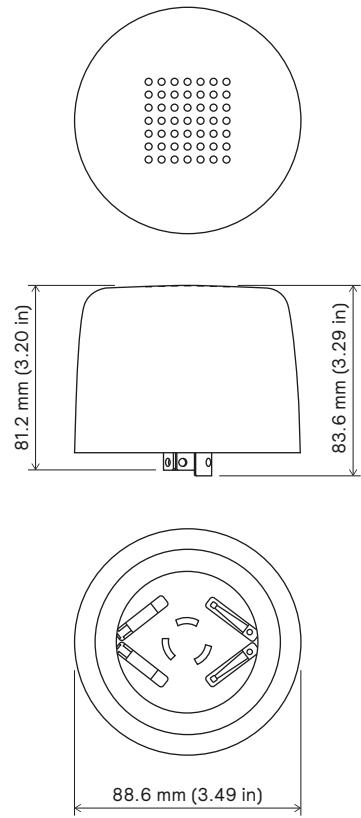
The CT node uses cellular communication to remotely manage, monitor and control each street light individually.

The CT node controls the street light by switching the mains supply and provides dimming by means of a digital (DALI) or analog 1-10V interface.

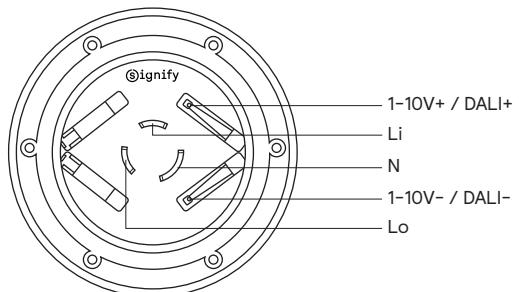
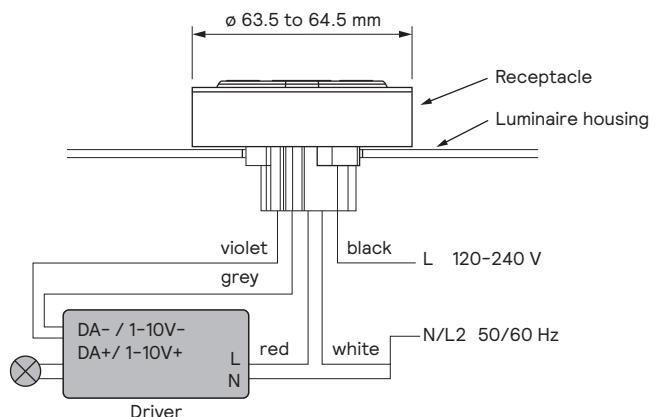
LLC7815

- The CT node is mounted to the luminaire by twist-locking it onto the 3, 5 or 7-pin NEMA receptacle.
- The CT node provides true plug and play commissioning: it automatically connects to the mobile network, automatically locates itself with the onboard GPS, and automatically uploads its asset data to the lighting management system.
- The CT node works together with any certified D4i motion sensor.
- The CT node includes a tilt sensor to get instant notification in case the orientation of the luminaire and/or pole changes significantly.
- The CT Node works with street lights from almost any manufacturer

Dimensional drawing



Wiring diagrams



Specifications

Dimensions¹		DALI supply	<ul style="list-style-type: none"> • DALI master with integrated DALI power supply • Suitable for multiple power supplies on a DALI bus
Component height	83.6 mm (3.29 in)	Supply voltage	Min. 11.5 V, Max. 22 V
Cover height	74.4 mm (2.93 in)	Guaranteed supply current	Min. 10 mA
Diameter	88.6 mm (3.49 in)	Max. supply current	Max. 30 mA
Weight	0.29 kg (0.64 lbs)	Mounting	
Color		5-pin plug conform ANSI C136.41	
LLC7815	Light Grey (RAL 7035)	Connectivity	
Supply		Technology	4G/5G (LTE Cat M1 bands 2, 4, 5, 12 and 13)
Mains voltage	347 to 480 Vac -15%/+10%	Energy metering	
Mains frequency	50/60 Hz -5%/+5%	Energy metering device	Inside CT node
Rated current	3.7A at 347 Vac or 2.7A at 480 Vac for electronic drivers and electro-magnetic ballasts	Energy meter accuracy	0.5% class conform ANSI C136:50
Power Consumption		Auto location	
Standby power	< 2.0 W	Positioning device	Inside CT node
Control interface		Positioning accuracy	CEP50 ≤ 2.5 m
Control method	ON/OFF, 1-10 V, DALI	Luminaire tilt notification	
Protection	Interface is protected against short circuit	Tilt sensor	Inside CT node
Insulation	UL Class 2, Basic insulation	Tilt threshold accuracy	± 5°
Load capacity	Maximum 3 LED drivers, and up to 3.7A at 347 Vac or 2.7A at 480 Vac.	Configurable range	Between 20 and 45°
DALI SR interface		Default setting	30°
Performance requirements	IEC 62386-101 edition 2.0	Light control	
DALI	IEC 62386-103 edition 2.0	Light sensing device	Inside CT node
	IEC 62386-351 edition 1.0	Measurement range	Between 5 and 400 lux
D4i device type	Type A (The D4i specification-Part 351 ensures the Type A device can be used together with Type B device, such as D4i sensor, in a D4i luminaire)	Configurable range	Remote configurable light level between 15 and 200 lux
		Default settings	Default dusk/dawn level 20/20 lux

¹ conform ANSI C136.48

Astronomical clock control	
Configurable range	Remote configurable time offset range -120 to 120 minutes, sun elevation angle range -25 to 25°
Default settings	Default dusk/dawn angle 0°/0°
Surge immunity	
Power supply	6 kV/3kA acc. ANSI C136.10
Control surge (diff. mode)	0.5 kV acc. IEC61000-4-5. 40 Ω, 1.2/50 μs, 8/20 μs
Control surge (comm. mode)	1 kV acc. IEC61000-4-5. 40 Ω, 1.2/50 μs, 8/20 μs
Temperature characteristics	
Operating temperature	-40 to 70 °C (-40 to 158 °F)
Tcase max	86 °C measured at Tcase point
Tcase life	38 °C measured at Tcase point
Storage temperature	-40 to 85 °C (-40 to 185 °F)
Relative humidity	5 to 95% non-condensing
Lifetime	
90% survivals after 15 years continuous operation (125,000 hours) at Tcase-life.	

Certificates and Standards	
Approval markings	cULus, FCC, ISED, D4i
Operability markings	D4i
Ingress protection classification	IP66 (installed condition for CT node only in combination with NEMA compatible receptacle)
Impact resistance classification	IK08
Sustainability	
RoHS directive	2011/65/EU
Hazardous substances	Directive 2011/65/EU, as amended by Directive (EU) 2015/863 of March 2015
FCC	
EMC	FCC47 Part 15B Class A, ICES-003, Issue 6 class A
Telecommunication	FCC47 CFR 22H, FCC47 CFR 24E, FCC47 CFR 27C RSS-130, RSS-132, RSS-133, RSS-139
RF Exposure	FCC47 part1.1307 & 2.1091, RSS-102
Safety	UL773, CSA C22.2 No. 182.2
PTCRB certified	



Ordering Data

Type	Order code	Country of Origin
LLC7815/00 CT NODE NEMA5 ACHV P US4VF LG	9137 010 66413	Poland

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