

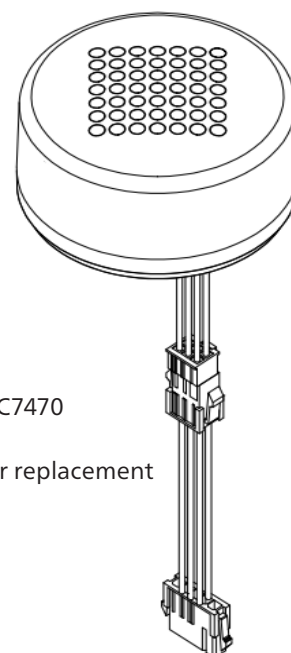


Specification Sheet

LLC747x RF Node

The RF Node LLC747x is designed to control the outdoor luminaires, with standard Conduit (20 MM) socket mounted on the top. The socket facilitates easy installation of the RF Node in factory and in the field.

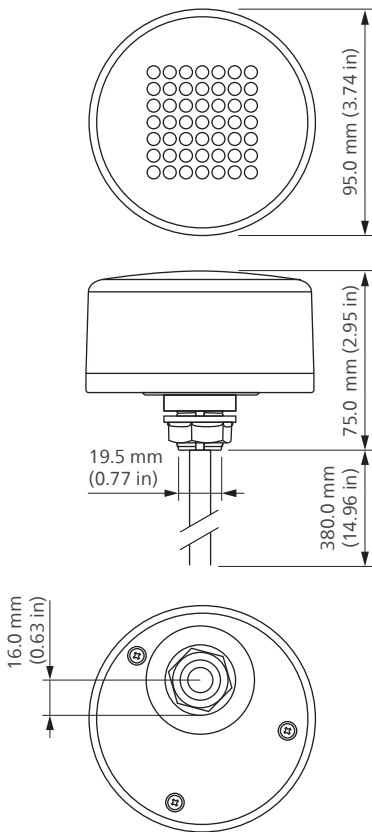
RF Nodes are compatible with CityTouch remote light management systems. Multiple RF nodes form a mesh network, and exchange data between the luminaires and the light management system via an RF gateway.



For replacement

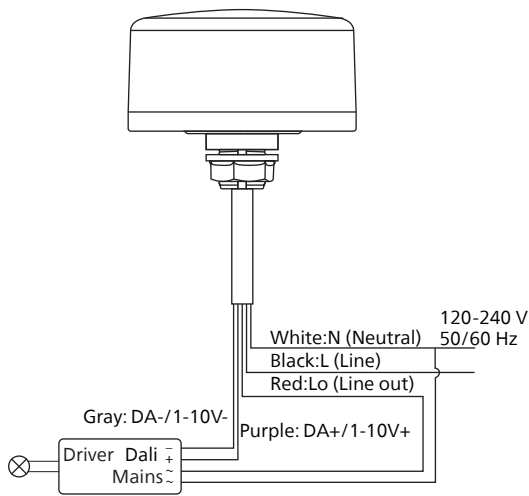
LLC747x

Dimensional drawings



D Note
RF node can only be used in overvoltage category II environment classified as IT equipment.

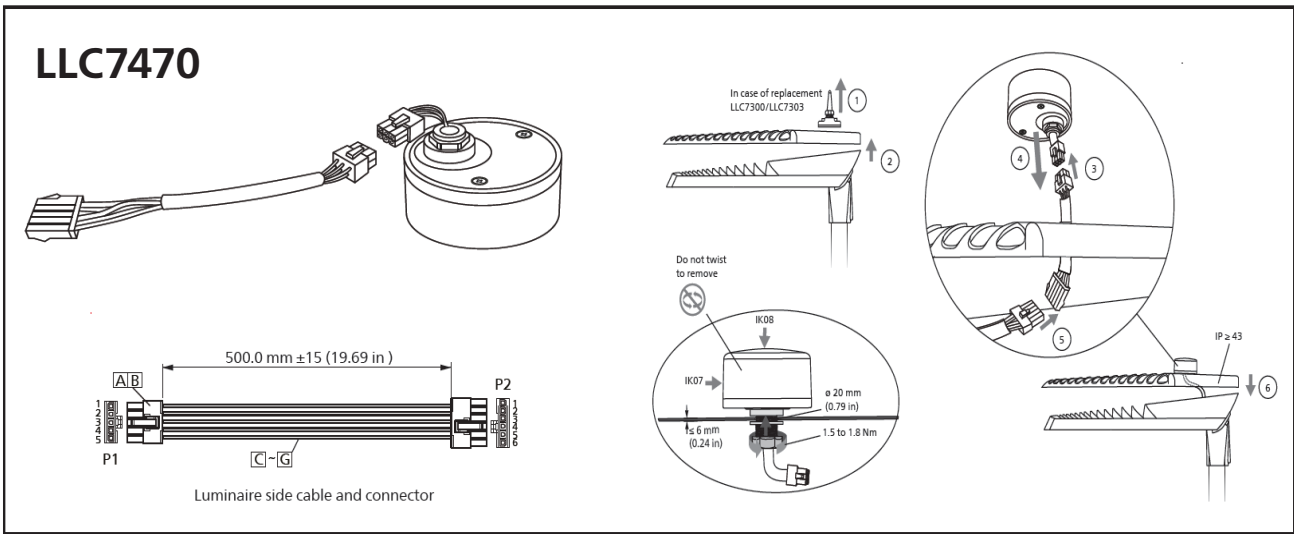
Wiring diagrams



Color of the wires

White	Neutral
Black	Line
Red	Switched line
Violet	1-10 V / DA +
Grey	1-10 V / DA -

Replacement of gen1 with gen2 20 mm:



Specifications

Product dimensions

Height	75 mm (2.95 in)
Width	95 mm (3.74 in)
Net weight per piece	0.245 kg (0.54 lb)

Operating conditions

Ambient temperature (t _a)	-25 to 70 °C (LLC7470)
Relative humidity	5% to 95%, non-condensing

Non-operating conditions

Storage temperature	-40 to 85 °C
Relative humidity	5% to 95%, non-condensing

Housing

Glow wire	750 °C
Ingress protection	Suitable for IP66 luminaires. The luminaire shall provide the 20 mm interface.
Mechanical impact protection	IK08 (Top), IK07 (Side)
Plug	Supports 20MM Conduit
Material rating for Flammability	UL94 V2
Material rating for UV resistance and Weather resistance	UL F1
Color	
LLC7470 (Replacement)	Light Grey
LLC7471	Black/Smoke Grey
LLC7474	Light Grey with GPS

Mounting

Fix to luminaire with screw thread through 20 mm hole and provided nut

Location

Positioning system (LLC7474)	Build in GPS, CEP50 ≤ 2.5 m (8 ft)
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Lifetime

90% survivals after 15 years continuous operation (125,000 hours) at Tcase-life

Surge immunity

Power supply 6 kV Common Mode acc. IEC61000-4-5. 2 Ω, 1.2/50 μs, 8/20 μs

Control surge (diff. mode) 0.5 kV acc. IEC61000-4-5. 40 Ω, 1.2/50 μs, 8/20 μs

DALI Interface

DALI Supply voltage	Min. 11.5 V, Max. 22 V
Guaranteed supply current	Min. 10 mA
Max. supply current	Max. 30 mA
Insulation	DALI: Electrical Insulation 1-10V: Basic insulation
DALI Performance requirements	IEC 62386-101 edition 2.0 IEC 62386-103 edition 2.0 IEC 62386-351 edition 1.0
DALI supply	DALI master with integrated DALI power supply Suitable for multiple power supplies on a DALI bus

Power Supply

Power consumption	Standby: 1.5 W Nominal: 2.5 W
Mains voltage	120 to 240 Vac
Operation voltage range	120 to 277 Vac
Mains frequency	50 to 60 Hz
Energy metering	+/- 5% for 220 to 240 V

Light-control

Light sensing device	Inside RF node
Lux measurement	15 to 200 Lux
ON / OFF factory settings	ON threshold: 18 Lux OFF threshold: 35 Lux

Wireless connectivity

Center frequency	868.3 MHz
Maximum Effective Radiated Power, e.r.p.	No more than 25mW e.r.p.
Protocol	IEEE802.15.4
Range	Open field (at an installation height of 3.5 m): <ul style="list-style-type: none"> • 300m from RF Node to RF Node • 50m from RF Node to Segment Controller (SC), and SC at an installation height of 0.5m.

Control interface

Control Method	ON/OFF, DALI, 1-10V
DALI	DALI master with integrated DALI power supply Supports max 4 DALI drivers
1-10 V	Supports max: 4x 1-10 V drivers

Relay

Electronic Fluorescent Blast	4A @ 120 to 240 VAC for EL driver - AC Electrical Discharge Lamps
Standard Ballast	4A @ 120 to 240 VAC for EM ballasts - AC Electrical Discharge Lamps
Insulation	DALI - Electrical Insulation 1-10v - Basic insulation

Compliance

Marking & certificate	CE, UKCA, ENEC, CB
Restriction of the use of Hazardous Substances in electrical and electronic equipment	RoHS Directive 2011/65/EU as amended by Directive (EU) 2015/863 of March 2015
Radio Equipment Directive (RED) 2014/53/EU	IEC/EN 61347-1, IEC/EN 61347-2-11 IEC/EN 62368-1, ETSI EN 300 220-1 ETSI EN 300 220-2, ETSI EN 301 489-1 ETSI EN 301 489-3, ETSI EN 301 489-19 ETSI EN 303 413, EN 55032, EN 55035 EN 55015, EN 61547, EN 50663, EN 62493
Restriction of the use of Hazardous Substances in electrical and electronic equipment	RoHS substance restrictions (Directive 2011/65/EU) RoHS substance restrictions amendment 1 (Directive 2011/65/EU, as amended by Directive (EU) 2015/863 of March 2015)



Packing data

Type	Box dimensions	Qty	Material	Weight net	Weight gross
Outer Box (30 pcs.)	572 x 369 x 299 mm (21.46 x 13.66 x 8.66 in)	1	Cardboard	8 kg (17.64 lb)	10.8 kg (23.81 lb)

Ordering Data

Type	Description	12NC	EAN code level 1	EAN code level 3	EOC
LLC7470	LLC7470/00 RF NODE 20MM5 ACLV 868MHZ LG	9137 010 41903	8719514 412934	8719514 412941	412934 00
LLC7471	LLC7471/00 RF NODE 20MM5 ACLV 868MHZ SG	9137 010 43103	8719514 412910	8719514 412927	412910 00
LLC7474	LLC7474/00 RF NODE 20MM5 ACLV 868MHZ GLG	9137 010 43203	8719514 412958	8719514 412965	412958 00

Note

Check with your Signify representative on the availability of the RF node in the specific market, before placing an order.

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