LUMEC
by signify

Urban

Transit

TR10 Post Top

The versatility and character of Lumec **Transit** LED post top and pendant luminaires is clear. Combining stunning industrial looks with outstanding photometric performance, the Transit luminaires blend modern and traditional style with leading-edge engineering that have made Lumec luminaires the perfect choice for effective urban area lighting.

Project:

Location:

Cat.No:

Type:

Lamps: Qty:

Notes:

Ordering guide

example: TR10-72W32LED4K-G3-ACDR-LE3A-120-DMG-SMB-RC-BKTX

Series	LED module	Gen.	Globe	Optical system	Voltage	Driver options	Luminaire options	Poles/Brackets	Finish
TR10		G3	ACDR Acrylic Globe	**LE2A**[2] Type II (ASYM) w/globe **LE3A**[2] Type III (ASYM) w/globe **LE4A**[2] Type IV (ASYM) w/globe	120 208 240 277 347 480	**AST**[3] Pre-set driver for progressive start-up **CDMGE25**[3] 8 hrs. 25% reduction **CDMGE50**[3] 8 hrs. 50% reduction **CDMGE75**[3] 8 hrs. 75% reduction **CDMGM25**[3] 6 hrs. 25% reduction **CDMGM50**[3] 6 hrs. 50% reduction **CDMGM75**[3] 6 hrs. 75% reduction **CDMGS25**[3] 4 hrs. 25% reduction **CDMGS50**[3] 4 hrs. 50% reduction **CDMGS75**[3] 4 hrs. 75% reduction **CDMGP**[3] Dimming level determined by the user **CLO**[3] Pre-set driver to manage lumen depreciation **DMG** 0-10V **OTL**[3] Pre-set driver to signal end of life of the lamp **SRD**[1] Sensor ready driver, standard configuration **SRD1**[1] Sensor ready driver, alternate configuration	**HS** House Side Shield **PH7**[5] Photoelectric cell, bottom type **PH8**[5] Photoelectric cell **PH9**[5] Shorting Cap **PHXL**[5] Photoelectric cell, extended life **RC**[4,5] Receptacle 3-pins **RCD7**[4,6] Receptacle 7 pin **SP2** 20kV/20kA Surge Protector (optional) **TN2.875C** 2-7/8" dia. tenon adaptor **TN3** 3" dia. tenon adaptor **TN3.5** 3-1/2" dia. tenon adaptor **WC** without cupola	Consult with signify.com/outdoorluminaires for details and the complete line of Signify poles and brackets.	**Textured** **BE2TX** Midnight Blue **BE6TX** Ocean Blue **BE8TX** Royal Blue **BG2TX** Sandstone **BKTX** Black **BRTX** Bronze **GN4TX** Blue Green **GN6TX** Forest Green **GN8TX** Dark Forest Green **GNTX** Green **GY3TX** Medium Grey **RD2TX** Burgundy **RD4TX** Scarlet **WHTX** White **Other** **GR** Gray Sandtex **NP** Natural Aluminum **TG** Hammertone Gold
	3000K **35W32LED3K**[1] **55W32LED3K**[1] **55W48LED3K** **72W32LED3K** **80W48LED3K** **4000K** **35W32LED4K**[1] **55W32LED4K**[1] **55W48LED4K** **72W32LED4K** **80W48LED4K**		–	**LE2F** Type II (ASYM) w/flat glass lens **LE2S** Type II (ASYM) w/sag glass lens **LE3F** Type III (ASYM) w/flat glass lens **LE3S** Type III (ASYM) w/sag glass lens **LE4F** Type IV (ASYM) w/flat glass lens **LE4S** Type IV (ASYM) w/sag glass lens **LE5F**[3] Type V (SYMM) w/flat glass lens **LE5S**[3] Type V (SYMM) w/sag glass lens					

1. Not available 347-480 volt.
2. Globe Material ACDR is required with this optical system.
3. Not available with HS option.
4. Use of photoelectric cell or shorting cap is required to ensure proper illumination.|
5. Not available with RCD7.
6. The RCD7 is located on top of the roof in place of the finial for use with a control node.

Note: If DALI or 5 or 7 pin receptacle is required contact factory.

TR10 Transit LED Post Top

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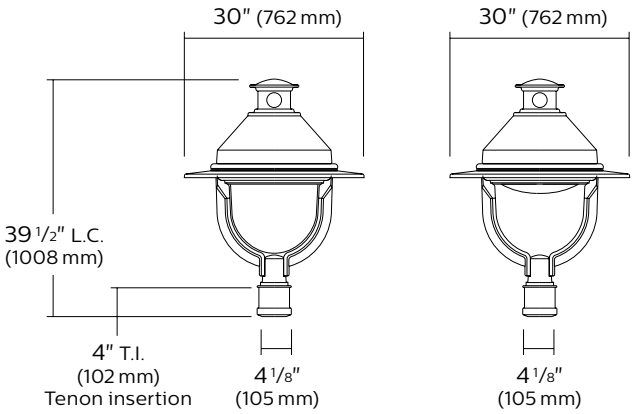
Dimensions



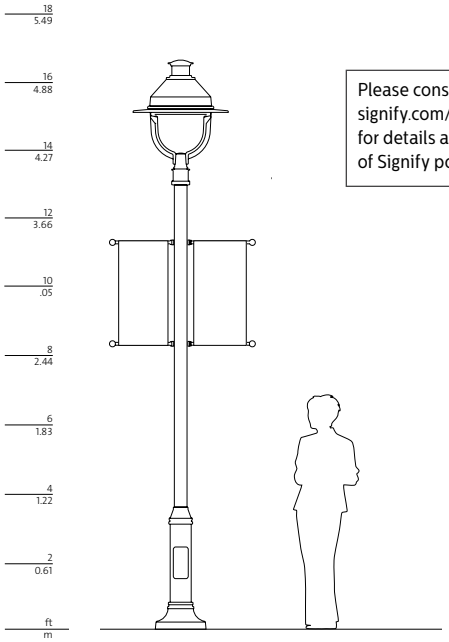
TR10
(shown w/globe)

EPA: 1.52 sq.ft.
Weight: 40 lbs. (18.1 kg)

TR10
(shown w/sag lens)

EPA: 1.52 sq.ft.
Weight: 40 lbs. (18.1 kg)

Poles



Please consult with data on signify.com/outdoorluminaires for details and the complete line of Signify poles and brackets.

TR10
Pole: AM6-BA

TR10 Transit LED Post Top

Urban Luminaire

LED Wattage and Lumen Values: for TR10 with Flat lens

Ordering Code: Flat lens	Total LEDs	LED current (mA)	Color Temp (K)	Average System Wattage (W)	LE2F			LE3F			LE4F			LE5F		
					Lumen Output	Efficacy (LPW)	Efficacy (LPW)	Lumen Output	Efficacy (LPW)	Efficacy (LPW)	Lumen Output	Efficacy (LPW)	Efficacy (LPW)	Lumen Output	Efficacy (LPW)	Efficacy (LPW)
35W32LED3K-G3-x	32	37	3000	37	4031	B1-U0-G1	109	4051	B1-U0-G1	109	4101	B1-U0-G1	111	4035	B3-U0-G3	109
55W32LED3K-G3-x	32	55	3000	55	5783	B1-U0-G1	105	5812	B1-U0-G1	106	5883	B1-U0-G2	107	5789	B3-U0-G3	105
72W32LED3K-G3-x	32	71	3000	71	7293	B2-U0-G1	103	7329	B1-U0-G1	103	7419	B1-U0-G2	104	7300	B3-U0-G3	103
55W48LED3K-G3-x	48	53	3000	53	6047	B1-U0-G1	114	6077	B1-U0-G1	115	6151	B1-U0-G2	116	6053	B3-U0-G3	114
80W48LED3K-G3-x	48	80	3000	80	8674	B2-U0-G1	108	8718	B2-U0-G2	109	8824	B2-U0-G2	110	8683	B3-U0-G3	109
35W32LED4K-G3-x	32	350	4000	37	4233	B1-U0-G1	114	4254	B1-U0-G1	115	4306	B1-U0-G1	116	4237	B3-U0-G3	115
55W32LED4K-G3-x	32	530	4000	55	6073	B1-U0-G1	110	6103	B1-U0-G1	111	6178	B1-U0-G2	112	6079	B3-U0-G3	111
72W32LED4K-G3-x	32	700	4000	71	7657	B2-U0-G1	108	7696	B1-U0-G2	108	7790	B1-U0-G2	110	7665	B3-U0-G3	108
55W48LED4K-G3-x	48	350	4000	53	6349	B1-U0-G1	120	6381	B1-U0-G1	120	6459	B1-U0-G2	122	6356	B3-U0-G3	120
80W48LED4K-G3-x	48	530	4000	80	9108	B2-U0-G1	114	9154	B2-U0-G2	114	9265	B2-U0-G2	116	9117	B3-U0-G3	114

LED Wattage and Lumen Values: for TR10 with Sag lens

Ordering Code: Sag lens	Total LEDs	LED current (mA)	Color Temp (K)	Average System Wattage (W)	LE2S			LE3S			LE4S			LE5S		
					Lumen Output	Efficacy (LPW)	Efficacy (LPW)	Lumen Output	Efficacy (LPW)	Efficacy (LPW)	Lumen Output	Efficacy (LPW)	Efficacy (LPW)	Lumen Output	Efficacy (LPW)	Efficacy (LPW)
35W32LED3K-G3-x	32	350	3000	37	4053	B1-U2-G1	110	4090	B1-U1-G1	111	4146	B1-U1-G1	112	4120	B3-U1-G3	111
55W32LED3K-G3-x	32	530	3000	55	5815	B1-U2-G1	106	5868	B1-U2-G1	107	5947	B1-U2-G2	108	5911	B3-U2-G3	107
72W32LED3K-G3-x	32	700	3000	71	7332	B2-U2-G1	103	7400	B1-U2-G2	104	7500	B1-U2-G2	106	7454	B3-U2-G3	105
55W48LED3K-G3-x	48	350	3000	53	6080	B1-U2-G1	115	6135	B1-U2-G1	116	6218	B1-U2-G2	117	6181	B3-U2-G3	117
80W48LED3K-G3-x	48	530	3000	80	8721	B2-U2-G1	109	8801	B1-U2-G2	110	8920	B1-U2-G2	112	8866	B3-U2-G3	111
35W32LED4K-G3-x	32	350	4000	37	4256	B1-U2-G1	115	4295	B1-U2-G1	116	4353	B1-U2-G1	118	4326	B3-U1-G3	117
55W32LED4K-G3-x	32	530	4000	55	6106	B1-U2-G1	111	6162	B1-U2-G1	112	6245	B1-U2-G2	114	6207	B3-U2-G3	113
72W32LED4K-G3-x	32	700	4000	71	7699	B2-U2-G1	108	7770	B1-U2-G2	109	7875	B1-U2-G2	111	7827	B3-U2-G3	110
55W48LED4K-G3-x	48	350	4000	53	6384	B1-U2-G1	120	6442	B1-U2-G1	122	6529	B1-U2-G2	123	6490	B3-U2-G3	122
80W48LED4K-G3-x	48	530	4000	80	9157	B2-U2-G2	114	9241	B2-U2-G2	116	9366	B1-U2-G2	117	9309	B4-U2-G4	116

LED Wattage and Lumen Values: for TR10 with Prism globe

Ordering Code: Prism globe (3000K)	Total LEDs	LED current (mA)	Color Temp (K)	Average System Wattage (W)	LE2A			LE3A			LE4A			LE5A		
					Lumen Output	Efficacy (LPW)	Efficacy (LPW)	Lumen Output	Efficacy (LPW)	Efficacy (LPW)	Lumen Output	Efficacy (LPW)	Efficacy (LPW)	Lumen Output	Efficacy (LPW)	Efficacy (LPW)
35W32LED3K-G3-x	32	350	3000	37	3945	B1-U3-G1	107	3995	B1-U2-G1	108	4080	B1-U2-G1	110	4120	B3-U1-G3	111
55W32LED3K-G3-x	32	530	3000	54	5660	B1-U3-G1	105	5731	B1-U3-G1	106	5853	B1-U3-G2	108	5911	B3-U2-G3	107
72W32LED3K-G3-x	32	700	3000	73	7137	B1-U3-G1	98	7227	B1-U3-G2	99	7380	B1-U3-G2	101	7454	B3-U2-G3	105
55W48LED3K-G3-x	48	350	3000	54	5918	B1-U3-G1	110	5992	B1-U3-G1	111	6119	B1-U3-G2	113	6181	B3-U2-G3	117
80W48LED3K-G3-x	48	530	3000	80	8489	B2-U3-G2	106	8596	B2-U3-G2	107	8778	B2-U3-G2	110	8866	B3-U2-G3	111
35W32LED4K-G3-x	32	350	4000	37	4143	B1-U3-G1	112	4195	B1-U2-G1	113	4284	B1-U2-G1	116	4326	B3-U1-G3	117
55W32LED4K-G3-x	32	530	4000	54	5943	B1-U3-G1	110	6018	B1-U3-G1	111	6145	B1-U3-G2	114	6207	B3-U2-G3	113
72W32LED4K-G3-x	32	700	4000	73	7494	B1-U3-G1	103	7589	B1-U3-G2	104	7749	B1-U3-G2	106	7827	B3-U2-G3	110
55W48LED4K-G3-x	48	350	4000	54	6214	B1-U3-G1	115	6292	B1-U3-G2	117	6425	B1-U3-G2	119	6490	B3-U2-G3	122
80W48LED4K-G3-x	48	530	4000	80	8913	B2-U3-G2	111	9026	B2-U3-G2	113	9217	B2-U3-G2	115	9309	B4-U2-G4	116

Actual performance may vary due to installation variables including optics, mounting/ceiling height, dirt depreciation, light loss factor, etc.; highly recommended to confirm performance with a layout - contact Applications at signify.com/outdoorluminaires.
Note: Some data may be scaled based on tests of similar. But not identical luminaires.

TR10 Transit LED Post Top

Urban Luminaire

Specifications

Housing

Cupola: Decorative spun aluminum 1100-0, mechanically mounted on hood.

Hood: Cast 356 aluminum dome, mechanically assembled on the luminaire.

Guard: With 2 cast aluminum 356 arms, this guard is welded to the fitter and to the access mechanism.

Skirt: Spun 1100-0 aluminum, mechanically assembled on the luminaire.

Access-mechanism

A die cast A360 aluminum technical ring with latch and hinge. The mechanism shall offer tool free access to the inside of the luminaire. An embedded memory retentive gasket shall ensure weatherproofing.

Light engine

LEDgine composed of 5 main components: Heat Sink / Lens / LED lamp / Driver / Optical System. Electrical components are RoHS compliant.

LED engine

Composed of high-performance white LEDs. Color temperature as per ANSI/NEMA bin Neutral White, 4000 Kelvin nominal (3985K +/-275K or 3710K to 4260K) or Warm white, 3000 Kelvin nominal (3045K +/- 175K or 2870K to 3220K), CRI 70 Min. 75 Typical.

Lens

LExF / LExS: Made of soda lime tempered glass lens, mechanically assembled and sealed onto the lower part of the heat sink.

LExA (Globe): Made of one-piece seamless injection-molded impact-resistant (DR) acrylic having an inner prismatic surface. The globe is mechanically assembled and sealed onto the lower part of the heat sink.

Heat sink

Made of cast aluminum optimizing the LEDs efficiency and life. Product does not use any cooling device with moving parts (only passive cooling device).

Optical system

Composed of high performance optical grade PMMA acrylic refractor lenses to achieve desired distribution optimized to get maximum spacing, target lumens and a superior lighting uniformity. Optical system is rated IP66. Performance shall be tested per LM 63, LM 79 and TM 15 (IESNA) certifying its photometric performance. Street side indicated.

Prismatic globe: IP66 rated optical system, composed of individual pre-oriented lens to achieve desired distribution, assembled with globe having an inner prismatic surface permanently sealed onto the lower part of the heat sink.

LE2A - Type II (ASYM) with globe (ACDR)
LE3A - Type III (ASYM) with globe (ACDR)
LE4A - Type IV (ASYM) with globe (ACDR)

Sag lens: IP66 rated optical system, composed of individual pre-oriented lens to achieve desired distribution, assembled with a tempered-glass sag lens permanently sealed onto the lower part of the heat sink.

LE2S - Type II (ASYM) with sag glass lens
LE3S - Type III (ASYM) with sag glass lens
LE4S - Type IV (ASYM) with sag glass lens
LE5S - Type V (SYMM) with sag glass lens

Flat lens: IP66 rated optical system, composed of individual preoriented lens to achieve desired distribution, assembled with a tempered-glass flat lens permanently sealed onto the lower part of the heat sink.

LE2F - Type II (ASYM) with flat glass lens
LE3F - Type III (ASYM) with flat glass lens
LE4F - Type IV (ASYM) with flat glass lens
LE5F - Type V (SYMM) with flat glass lens

Driver

Driver comes standard with dimming compatible 0-10V. High power factor of 90% minimum. Electronic driver, operating range 50/60 Hz. Auto adjusting universal voltage input from 120 to 277 or 347 to 480 VAC rated for both application line to line or line to neutral, Class I, THD of 20% max.

Maximum ambient operating temperature from 40°F (40°C) to 130°F (55°C). Certified in compliance to UL1310 cULus requirement. Dry and damp location. Assembled on a unitized removable tray with Tyco quick disconnect plug resisting to 221°F (105°C). The current supplying the LEDs will be reduced by the driver if the driver experiences internal overheating as a protection to the LEDs and the electrical components. Output is protected from short circuits, voltage overload and current overload. Automatic recovery after correction. Standard built in driver surge protection of 2.5kV (min).

Driver options

AST: Pre-set driver for progressive start-up of the LED module(s) to optimize energy management and enhance visual comfort at start-up.

CLO: Pre-set driver to manage the lumen depreciation by adjusting the power given to the LEDs offering the same lighting intensity during the entire lifespan of the LED module.

OTL: Pre-set driver to signal end of life of the LED module(s) for better fixture management.

DMG: Dimmable driver 0-10V.

CDMG: Dynadimmer standard dimming functionalities including pre-programmed scenarios to suit many applications and needs from safety to maximum energy savings.

SRD: Sensor Ready Driver including SR communication (used for dimming and other functionalities), 24V auxiliary supply and a logical signal input (LSI) connected to the top NEMA twist lock receptacle.

SRD1: Sensor Ready Driver including SR communication (used for dimming and other functionalities) but with 24V auxiliary supply and a logical signal input (LSI) not connected to the top NEMA twist lock.

* Contact factory for DALI options.

Order Code	Dimming		
	Scenario	Duration	Level
CDMGS25	Safety	4 hours	25%
CDMGS50	Safety	4 hours	50%
CDMGS75	Safety	4 hours	75%
CDMGM25	Median	6 hours	25%
CDMGM50	Median	6 hours	50%
CDMGM75	Median	6 hours	75%
CDMGE25	Economy	8 hours	25%
CDMGE50	Economy	8 hours	50%
CDMGE75	Economy	8 hours	75%

Surge protector

Surge protector tested in accordance with ANSI/IEEE C62.45 per ANSI/IEEE C62.41.2 Scenario I Category C High Exposure 10kV/10kA waveforms for Line Ground, Line Neutral and Neutral Ground, and in accordance with U.S. DOE (Department of Energy) MSSLC (Municipal Solid State Street Lighting Consortium) model specification for LED roadway luminaires electrical immunity requirements for High Test Level 10kV / 10kA. SP2 20kV/20kA optional.

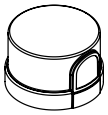
TR10 Transit LED Post Top

Urban Luminaire

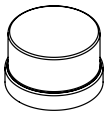
Specifications (continued)

Luminaire options

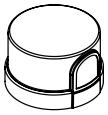
HS
House
side shield



PH8
Photoelectric cell,
twist-lock type.
Allows 90° rotation.

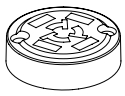


PH9
Shorting cap,
twist-lock type



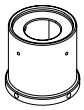
PHXL
Extended life
Photoelectric cell,
twist-lock type

RC
Receptacle
3-pins

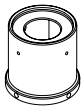


RCD7
Receptacle
7-pins.

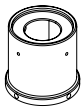
SP2 20kV/20kA integral surge protector (optional)



TN2.875C
2-7/8'' dia.
tenon adaptor



TN3
3'' dia.
tenon adaptor



TN3.5
3-1/2'' dia.
tenon adaptor

Fitter

Cast 356 aluminum c/w 4 set screws 3/8 16 UNC. This fitter holds 2 arms made of cast aluminum 356 mechanically assembled. Slip fits on a 4" (102mm) outside diameter X 4" (102mm) long tenon.

Finish

In accordance with the AAMA 2603 standard. Application of polyester powder coat paint (4 mils/100 microns) with +/- 1 mils/24 microns of tolerance. The Thermosetting resins provides a discoloration resistant finish in accordance with the ASTM D2244 standard, as well as luster retention in keeping with the ASTM D523 standard and humidity proof in accordance with the ASTM D2247 standard. The surface treatment achieves a minimum of 2000 hours for salt spray resistant finish in accordance with testing performed and per ASTM B117 standard.

Textured Finish Options:

BE2TX: Textured Midnight Blue
BE6TX: Textured Ocean Blue
BE8TX: Textured Royal Blue
BG2TX: Textured Sandstone
BKTX: Textured Black
BRTX: Textured Bronze
GN4TX: Textured Blue Green
GN6TX: Textured Forest Green
GN8TX: Textured Dark Forest Green
GNTX: Textured Green
GY3TX: Textured Medium Grey
RD2TX: Textured Burgundy
RD4TX: Textured Scarlet
WHTX: Textured White

Non-Textured Finish Options:

GR: Gray Sandtex
NP: Natural Aluminum
TG: Hammer-tone Gold

Hardware

All exposed screws shall be complete with Ceramic primer-seal base coat to reduce seizing of the parts and offers a high resistance to corrosion. All seals and sealing devices are made and/or lined with EPDM and/or silicone and/or rubber.

Wiring

Gauge (#14) TEW/AWM 1015 or 1230 wires, 6" (152mm) minimum exceeding from luminaire.

Luminaire useful life

Refer to IES files for energy consumption and delivered lumens for each option. Based on ISTMT in situ thermal testing in accordance with UL1598 and UL8750, using LM-80 data from LED manufacturers and engineering prediction methods, the luminaire useful life is expected to reach 100,000+ hours with >L70 lumen maintenance @ 25°C. Luminaire Useful Life accounts for LED lumen maintenance AND all of these additional factors including: LED life, driver life, PCB substrate, solder joints, on/off cycles, burning hours and corrosion. Entire luminaire is rated for operation in ambient temperature of -40°C / -40°F up to +35°C / +95°F.

Quality control

Manufactured to ISO 9001 2008 standards and ISO 14001-2004 International Quality Standards Certification.

LED products (manufacturing standard)

The electronic components sensitive to electrostatic discharge (ESD) such as light emitting diodes (LEDs) are assembled in compliance with IEC61340 5 1 and ANSI/ ESD S20.20 standards so as to eliminate ESD events that could decrease the useful life of the product.

Quality control

Manufactured to ISO 9001 2008 standards and ISO 14001-2004 International Quality Standards Certification.

Certifications and Compliance

CSA, cULus Listed for Canada and USA.

Luminaires are DesignLights Consortium qualified.

LED Performance

Predicted lumen depreciation data[1]				
Ambient Temperature (°C)	Driver mA	Calculated L_{70} hours[1,2]	L_{70} per TM-21[2,3]	Lumen Maintenance % @ 60,000 hours
25°C	700 mA	>100,000	>60,000	86%

1. Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions.
2. L_{70} is the predicted time when LED performance depreciates to 70% of initial lumen output.
3. Calculated per IESNA TM21-11. Published L_{70} hours limited to 6 times actual LED test hours.

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