

**LED T8 - LINEAR REPLACEMENT LAMP**  
**DUAL-MODE/HYBRID SERIES UL**  
**TYPE A+B**



Intertek



**FEATURES:**

- Wattage:
  - 9W, 2FT, ≥1350 lumens, replaces 17W fluorescent T8
  - 11W, 3FT, ≥1,600 lumens, replaces 25W fluorescent T8
  - 12W, 4FT, ≥1,800 lumens, replaces 32W fluorescent T8
- Voltage (UL TYPE-B): 120V-277V applications
- Color Rendering Index (CRI): ≥83
- Beam angle: 190°
- THD <20%
- Power factor: ≥ 0.90
- Dual Mode: Can be used with compatible fluorescent ballast (UL-A) and ballast bypass (UL-B)
- Ballast bypass (UL-B): Can be wired for single-ended power or double-ended power.
- Compatible with shunted and non-shunted lamp holders
- Instant on
- Mercury free and virtually no UV or IR light
- Suitable for enclosed fixture
- Suitable for dry and damp locations
- ETL Sanitation listed (tested under NSF standard)
- All glass construction with PET coating
- Rated Lifetime @ L70: 50,000 Hours

**PRODUCT DESCRIPTION:**

MaxLite offers a safer, more reliable alternative to the dual-mode lamps on the market with the new Hybrid Series UL Type A/B LED T8 Lamp. Designed as a universal solution, the Hybrid Series lamp can be used with a compatible fluorescent ballast (UL-A) or ballast bypass (UL-B). Unlike competitors' lamps, the MaxLite product features improved integrated circuit (IC) technology that detects the lamp connection and corresponding operating mode. Each pin at the lamp base is engineered with a thermal fuse that detects overheating and responds by automatically shutting the lamp off. In addition, the lamp is packaged with a re-lamping label that provides a clear wiring description to help maintenance staff easily identify fixture modifications in the field. The MaxLite T8 also offers more robust ballast compatibility than competitors, including instant start, programmed start, and emergency ballast compatibilities.

**WARRANTY:**

5-year standard warranty  
(further details available at [www.maxlite.com/warranties](http://www.maxlite.com/warranties))  
Product may be eligible for a warranty extension to 10 years, for an additional fee. Contact MaxLite for details.

MODEL SELECTION (Full list of order codes on pg. 2)			Typical order example: L9T8AB235-CG		
L	9	T8	AB	2	
FAMILY	WATTAGE	LAMP TYPE	OPERATION	LENGTH	COLOR TEMPERATURE
L= LED Linear	9= 9W	T8= T8 tube	AB= Dual Mode A+B	2= 2FT	35-CG= 3500K, Coated Glass 40-CG= 4000K, Coated Glass 50-CG= 5000K, Coated Glass
L	11	T8	AB	3	
FAMILY	WATTAGE	LAMP TYPE	OPERATION	LENGTH	COLOR TEMPERATURE
L= LED Linear	11= 11W	T8= T8 tube	AB= Dual Mode A+B	3= 3FT	35-CG= 3500K, Coated Glass 40-CG= 4000K, Coated Glass 50-CG= 5000K, Coated Glass
L	12	T8	AB	4	
FAMILY	WATTAGE	LAMP TYPE	OPERATION	LENGTH	COLOR TEMPERATURE
L= LED Linear	12= 12W	T8= T8 tube	AB= Dual Mode A+B	4= 4FT	35-CG= 3500K, Coated Glass 40-CG= 4000K, Coated Glass 50-CG= 5000K, Coated Glass

### SPECIFICATIONS:

		L9T8AB2XX-CG	L11T8AB3XX-CG	L12T8AB4XX-CG
ITEM	SPECIFICATION	2FT - DETAILS	3FT - DETAILS	4FT - DETAILS
<b>GENERAL PERFORMANCE</b>	Bare Lamp Power (W)	8.5W	11.5W	12W
	System (UL-A) Power (W)	12W	14W	15.5W
	Bypass (UL-B) Power (W)	9W	12W	13W
	Lumens Delivered (lm)	1350-1420	1600-1650	1800-1900
	Efficacy (UL-A)	113-118 lm/w	114-118 lm/w	116-123 lm/w
	CRI	≥83		
	Beam Angle	190°		
	Color Temperature (CCT)	3500K, 4000K, 5000K		
	Lumen Maintenance (L70)	50,000 Hours		
<b>ELECTRICAL</b>	Power Factor	≥ 0.90		
	Input Voltage	120V-277V, 50/60 Hz		
<b>PHYSICAL</b>	Operating Temperature	-4°F to 113°F		
	Lens	Opal (Frosted) - Coated Glass		
<b>CERTIFICATION</b>	Certification	UL, CULus Classified, ETL Sanitation		
	Material Usage	RoHS compliant; no mercury		
	Environment	Dry & Damp, Enclosed Fixtures		
	Warranty	5 year standard warranty		
<b>QUALIFICATION</b>	DesignLight Consortium	DLC Listed		

Lighting layouts and spacing criteria available upon request

### ORDERING:

MODELS	DLC PRODUCT ID	BARE LAMP POWER (W)	SYSTEM (UL-A) POWER (W)	BYPASS (UL-B) POWER (W)	LUMENS (lm)	EFFICACY (lm/W)	CCT
<b>9W 2FT T8 MODELS</b>							
L9T8AB235-CG	PLSRNHV1JP1G	8.5W	12W	9W	1350	112 lm/W	3500K
L9T8AB240-CG	PL965FLVCC6A				1380	115 lm/W	4000K
L9T8AB250-CG	PLGDCFYKD348				1420	118 lm/W	5000K
<b>11W 3FT T8 MODELS</b>							
L11T8AB335-CG	PLGK52GQNL1N	11.5W	14W	12W	1600	114 lm/W	3500K
L11T8AB340-CG	PLKRU0NGV9SD				1625	116 lm/W	4000K
L11T8AB350-CG	PLLQF8KE9PIZ				1650	118 lm/W	5000K
<b>12W 4FT T8 MODELS</b>							
L12T8AB435-CG	PLF6U1JY4KRM	12W	15.5W	13W	1800	116 lm/W	3500K
L12T8AB440-CG	PL0NWWYTS0ZZR				1900	123 lm/W	4000K
L12T8AB450-CG	PLVXLG8KIZUW				1900	123 lm/W	5000K

### BALLAST COMPATIBILITY LIST:

BALLAST DESCRIPTION				1 LAMP LOAD		2 LAMPS LOAD		3 LAMPS LOAD		4 LAMPS LOAD		REMARK
BRAND	MODEL	START METHOD	# OF LAMPS	INPUT VOLTAGE		INPUT VOLTAGE		INPUT VOLTAGE		INPUT VOLTAGE		BALLAST VERSION
				120 V	277V	120 V	277V	120 V	277V	120 V	277V	
Arcata	ACT2P32ISUNV	IS	2	✓	✓	✓	✓	-	-	-	-	/
	ACT4P32ISUNV	IS	4	-	-	-	-	✓	✓	✓	✓	/
Advance	ICN-2P32-N	IS	2	X	X	✓	✓	-	-	-	-	REV C/E
	ICN-3P32-N	IS	3	-	-	✓	✓	✓	✓	-	-	REV D
	ICN-2P32-SC	IS	2	✓	✓	✓	✓	-	-	-	-	/
	IOPA-1P32-N	IS	1	✓	✓	-	-	-	-	-	-	REV B
	IOPA-2P32-N	IS	2	X	X	✓	✓	-	-	-	-	REV A
	IOPA-3P32-N	IS	3	-	-	✓	✓	✓	✓	-	-	REV B
	IOPA-1P32-LW-N	IS	1	X	X	-	-	-	-	-	-	REV A
	IOPA-2P32-LW-N	IS	2	X	X	✓	✓	-	-	-	-	REV B
	IOPA-4P32-LW-N	IS	4	-	-	-	-	✓	✓	✓	✓	REV A
	REL-2P32-SC	IS	2	✓	-	✓	-	-	-	-	-	/
	ICN-4P32-SC	IS	4	-	-	-	-	✓	✓	✓	✓	REV D
	ESPEN	VE232MVHIPHE	IS	2	X	X	✓	✓	-	-	-	-
VE232MVHIPL		IS	2	✓	✓	✓	✓	-	-	-	-	/
VE432MVHIP		IS	4	-	-	-	-	✓	✓	✓	✓	/
VE432MVHIPE		IS	4	-	-	-	-	✓	✓	✓	✓	/
Fulham	NPY-120-232-LT8	PS	2	X	-	X	-	-	-	-	-	/
	NPY-120-432-T8B	IS	4	-	-	-	-	✓	-	✓	-	/
	NPY-120-432-T8-IS	IS	4	-	-	-	-	✓	-	✓	-	/
	WHCG3-120-T8-IS	IS	3	-	-	✓	-	✓	-	-	-	/
	WH2-120-L	IS	1	✓	-	-	-	-	-	-	-	/
	WH5-120-L	IS	4	-	-	-	-	✓	-	✓	-	/
Fusion	FB232MVE	IS	2	✓	✓	✓	✓	-	-	-	-	/
	FB232MVE-N	IS	2	✓	✓	✓	✓	-	-	-	-	/
	FB232MVE-HE	IS	2	✓	✓	✓	✓	-	-	-	-	/
	FB232MVE-LHE	IS	2	✓	-	✓	-	-	-	-	-	/
	FB232MVE-PPS-HE	PS	2	✓	✓	✓	✓	-	-	-	-	/
	FB332MVE	IS	3	-	-	✓	✓	✓	✓	-	-	/
	FB432MVE	IS	4	-	-	-	-	✓	✓	✓	✓	/
	FB432MVE-HE	IS	4	-	-	-	-	✓	✓	✓	✓	/
	FB432MVE-N	IS	4	-	-	-	-	✓	✓	✓	✓	/
	FB432MVE-PPS-HE	PS	4	-	-	-	-	✓	✓	✓	✓	/
GE	GE 232-120-PS-N	PS	2	✓	-	✓	-	-	-	-	-	/
	GE232MAXP-N/ULTRA	IS	2	✓	✓	✓	✓	-	-	-	-	/
	GE232MAXP-H/ULTRA	IS	2	X	X	✓	✓	-	-	-	-	/
	GE232-MVPS-L	PS	2	✓	✓	✓	✓	-	-	-	-	/
GE232-MVPS-H	PS	2	X	X	✓	✓	-	-	-	-	/	

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BALLAST DESCRIPTION				1 LAMP LOAD		2 LAMPS LOAD		3 LAMPS LOAD		4 LAMPS LOAD		REMARK
BRAND	MODEL	START METHOD	# OF LAMPS	INPUT VOLTAGE		INPUT VOLTAGE		INPUT VOLTAGE		INPUT VOLTAGE		BALLAST VERSION
				120 V	277V	120 V	277V	120 V	277V	120 V	277V	
GE	GE332MAX-L/ULTRA	IS	3	-	-	✓	✓	✓	✓			/
	GE332MAX90-V60	IS	3	-	-	X	X	✓	✓	-	-	/
	GE332MV-N-DIY	IS	3	-	-	✓	✓	✓	✓	-	-	/
	GE432-120-N	IS	4	-	-	-	-	✓	-	✓	-	/
	GE432MAX-G-N	IS	4	-	-	-	-	✓	✓	✓	✓	/
	GE432MAX-H-42T	IS	4	-	-	-	-	✓	✓	✓	✓	/
	GE432MV-N-DIY	IS	4	-	-	-	-	✓	✓	✓	✓	/
Greenhill	GH4P32ISUNV	IS	4	-	-	-	-	✓	✓	✓	✓	/
Halco	EP332IS/MV/MC	IS	3	-	-	✓	✓	✓	✓	-	-	/
	EP432IS/L/MV/HE	IS	4	-	-	-	-	✓	✓	✓	✓	/
	EP432IS/MV/MC	IS	4	-	-	-	-	✓	✓	✓	✓	/
HOWARD	EP4/32IS/MV/MC/HE	IS	4	-	-	-	-	✓	✓	✓	✓	/
Huafeng	ENI-T8-32-P2SC-N	IS	2	✓	✓	✓	✓	-	-	-	-	/
	ENI-T8-32-P4MC-N	IS	4	-	-	-	-	X	✓	X	✓	/
KEYSTONE	KTEB-232-UV-IS-N-P	IS	2	✓	✓	✓	✓	-	-	-	-	Version D1
	KTEB-232-UV-PS-VDIM	PS	2	-	-	✓	✓	-	-	-	-	/
	KTEB-332-UV-IS-N-P	IS	3	-	-	✓	✓	✓	✓	-	-	Version B
	KTEB-432-UV-IS-N-P	IS	4	-	-	-	-	✓	✓	✓	✓	Version A1
Osram	QHE 2x32T8/UNV DIM-TC	PS	2	-	-	✓	✓	-	-	-	-	/
	QTP 4x32T8/UNV ISN-SC	IS	4	-	-	-	-	✓	✓	✓	✓	/
Pacific	EB-332IS-U	IS	3	-	-	✓	✓	✓	✓	-	-	/
	EB-432IS-U	IS	4	-	-	-	-	✓	✓	✓	✓	/
PQL	70201	IS	2	✓	✓	✓	✓	-	-	-	-	/
	70204	IS	4	-	-	-	-	✓	✓	✓	✓	/
Premium	BB-T8/UVH-2x32	IS	2	✓	✓	✓	✓	-	-	-	-	/
	BB-T8/UVH-3x32	IS	3	-	-	-	-	✓	✓	-	-	/
Robertson	RSW240T12120	PS	2	✓	-	✓	-	-	-	-	-	/
Standard	E232P1120L	IS	2	✓	-	✓	-	-	-	-	-	/
	E432T8IS120/H	IS	4	-	-	-	-	X	-	✓	-	/
	E432T8IS120/N/AS/BULK	IS	4	-	-	-	-	✓	-	✓	-	/
Sunpark	SL15T	PS	2	X	-	✓	-	-	-	-	-	/
Universal	B232PUSV3PLA	PS	2	X	X	X	X	-	-	-	-	REV A
	B232SR120S30	PS	2	-	-	X	-	-	-	-	-	REV E
	B432IUNVHP-A	IS	4	-	-	-	-	✓	✓	✓	✓	REV B

### BALLAST COMPATIBILITY LIST:

BALLAST DESCRIPTION				1 LAMP LOAD		2 LAMPS LOAD		3 LAMPS LOAD		4 LAMPS LOAD		REMARK	
BRAND	MODEL	START METHOD	# OF LAMPS	INPUT VOLTAGE		INPUT VOLTAGE		INPUT VOLTAGE		INPUT VOLTAGE		BALLAST VERSION	
				347V	480V	347V	480V	347V	480V	347V	480V		
Arcata	ACT2P32IS347	IS	2	✓	✓	✓	✓	-	-	-	-	/	
	ACT4P32IS347	IS	4	-	-	-	-	✓	✓	✓	✓	/	
Advance	GOPA-2P32-LW-SC	IS	2	✓	-	✓	-	-	-	-	-	REV D	
	GOPA-4P32-LW-SC	IS	4	-	-	-	-	✓	-	✓	-	REV D	
	GOPA-2P32-SC	IS	2	✓	-	✓	-	-	-	-	-	REV C	
	GOPA-4P32-SC	IS	4	-	-	-	-	✓	-	✓	-	REV D	
Fusion	FB232347E-HE	IS	2	✓	-	✓	-	-	-	-	-	/	
	FB232347E-L	IS	2	✓	-	✓	-	-	-	-	-	/	
	FB232347E-N	IS	2	✓	-	✓	-	-	-	-	-	/	
	FB232347E-PPS-HE	PS	2	✓	-	✓	-	-	-	-	-	/	
	FB432347E-HE	IS	4	-	-	-	-	✓	-	✓	-	/	
	FB432347E-L	IS	4	-	-	-	-	✓	-	✓	-	/	
	FB432347E-N	IS	4	-	-	-	-	✓	-	✓	-	/	
	FB432347E-PPS-HE	PS	4	-	-	-	-	✓	-	✓	-	/	
	GE	GE232MAX347-H	IS	2	X	-	✓	-	-	-	-	-	/
		GE232PS347-N	PS	2	✓	-	✓	-	-	-	-	-	/
GE332MAX347-H		IS	3	-	-	X	-	✓	-	-	-	/	
GE432MAX347-H		IS	4	-	-	-	-	X	-	✓	-	/	
GE432PS347-N		PS	4	-	-	-	-	✓	-	✓	-	/	
OSRAM	QHE 2x32 T8/347 ISL-SC	IS	2	✓	-	✓	-	-	-	-	-	/	
	QHE 2x32 T8/347 ISN-SC	IS	2	✓	-	✓	-	-	-	-	-	/	
Standard	E232T8IS347/H/90C	IS	2	X	-	X	-	-	-	-	-	/	
	E232T8IS347/L/BULK	IS	2	✓	-	✓	-	-	-	-	-	/	
	E232T8IS347/N/BULK	IS	2	✓	-	✓	-	-	-	-	-	/	
	E432PI347G01	IS	4	-	-	-	-	✓	-	✓	-	/	
	E432T8IS347/L/BULK	IS	4	-	-	-	-	✓	-	✓	-	/	
	E432T8IS347/N	IS	4	-	-	-	-	✓	-	✓	-	/	
	E432T8IS347/N/BULK	IS	4	-	-	-	-	✓	-	✓	-	/	
Universal	B232I347HE-A	IS	2	✓	-	✓	-	-	-	-	-	/	
	B432I347HE-A	IS	4	-	-	-	-	✓	-	✓	-	/	

EMERGENCY BALLAST		COMPATIBLE
BRAND	PART NUMBER	
Keystone	KT-EMRG-500	✓
	KT-EMRG-750-CFL4	✓
	KT-EMRG-1300-T5	✓
IOTA	ISL-54	✓