GE
Lighting

ULTRAMAX®
High-Efficiency Electronic Ballast

High Efficiency Instant Start Ballasts

- **Breakthrough Technology that Dramatically Improves Efficiency, Simplifies Installation and Delivers Optimal Lamp Performance**

- **NEW Products – UltraMax® 6H Ballast - Extreme 95% Efficiency**
  UltraMax® 480V 2, 3 & 4 Lamp High Ballast Factor

imagination at work

Transforming
The POWER Of Light™

GE revolutionizes lighting again with new, breakthrough technology

In the GE labs, our engineers have developed a breed of ballasts to make lighting systems that save more energy, are more adaptable. and deliver optimal lamp performance. The innovative, patented technology in our UltraMax® electronic ballasts exceeds expectations.

There's more to Ultra

M Multi-Voltage Control

A Arc-Guard Protection

X Xtreme Efficiency

Multi-Voltage technology means single UltraMax® model handles voltage from 120 through 277.

UltraMax® Ballasts can virtually "read" the incoming voltage and adapt automatically to any voltage from 108V to 305V.

The benefits of Multi-Voltage Control (MVC) are obvious:

- Fewer models handle more jobs. Eliminating inventory hassles
- MVC simplifies installation and eliminates guesswork at the job site.
- MVC compensates for incoming voltage fluctuations or variations from unreliable power.

GE's UltraMax® is compliant with UL 1598 with UL Type CC Anti-Arc Rating

UL 1598 includes a requirement for fluorescent luminaires with instant start ballasts and bi-pin lamp-holders to use a UL Type CC anti-arcing ballast or lamp-holders marked with a higher temperature rated Circle "I" construction and marking. Lighting fixture sockets can melt, crack and deform, creating an unsafe condition if an electric arc develops between a fluorescent lamp holder contact and a mis-seated or bent pin fluorescent lamp. Instant start ballasts that are not UL Type CC rated have a high open circuit voltage for starting and may create an unsafe arc if the lamp is not seated properly.

High efficiency delivers over 40% energy savings

All UltraMax® ballasts exceed the NEMA Premium® minimum efficiency requirements. Systems combining UltraMax® electronic ballasts and T8 energy saving lamps deliver over 40% energy savings over standard T12 systems. Since energy costs can be 80% of the overall cost of light, a more efficient system pays for itself in a short time and provide an excellent return on investment. Lamp frequency greater than 70kHz ensures no IR or anti-theft device interference.

120 277volts MVC Multi-Voltage Control

NEMA Premium®

ULTRAMAX® High-Efficiency Electronic Ballast

UltraMax® is ultra lamp friendly

With industry low lamp current crest factor (LCCF) of 1.4, UltraMax® ensures optimal lamp operation and maximum lamp life, which can save on lamp and maintenance costs and ensures GE's Ultra System limited warranty.

-22F Minimum Starting Temperature.

Cold temperature starting performance with standard T8 lamps.

UL 55C (131F) Ambient Rating.

GE's UltraMax®'s patented high temperature protection circuit ensures ballasts run cool in high temperatures. UltraMax® is one of the only electronic T8 ballasts that is UL Listed for operation up to 55C ambient environments.

Anti-Striation Control for better light quality, with no striations.

UltraMax®'s patented Anti-Striation Control circuit reduces likely-hood of lamp striations. This advanced technology eliminates the maintenance issues caused by striating lamps, often referred to as spiraling or swirling. This provides a flicker- and worry-free environment.

Fully parallel independent lamp operation makes systems easier to maintain

If one lamp fails, all the others in the system stay lit.

Ultra High Transient Protection in UltraMax® 480V

GE patented 3-Stage 3G Transient Suppression

– Meets IEEE/ANSI C Low* line to line transient capability up to 6KV, Best in Class

UltraMax® Ballasts are Ultra Cool™

UltraMax®'s high efficiency design results in ultra-cool operation that can provide additional AC energy savings. especially during peak demand periods. Combine GE's Ultra ballasts with cool running fixtures to achieve maximum system performance in hot temperatures. GE provides the Ultra Cool™ system certification with high grade fixture systems which means a 5 year 55C max ambient warranty.

A big idea in a small package

The UltraMax® housing has a small, low profile and is lightweight. UltraMax® 1 and 2 lamp L and N ballasts are in a new mini 1.3" wide housing for easy handling. UltraMax® 4H has been reduced in size to 9.5 x 1.7 x 1.2" and is greater than 7" smaller than other instant start 4H ballasts. That can be a big help in retrofits. It also means fixture designs can be more compact and streamlined.

Every unit is tested and proven before it's shipped

GE does 100% burn-in on every UltraMax® ballast; using our extreme open/short test, which simulates undesirable and harsh-use situations, so you are assured of a system you can rely on right out of the box.

GE Six Sigma quality backed by a full 5-year ballast limited warranty

UltraMax® ballasts are designed by GE's expert engineers and custom-manufactured to our exacting. Six Sigma specifications, all backed by a 5-year limited warranty. And, when used with GE T8 lamps you get our Ultra System limited warranty. (See gelighting.com system warranty page for details).

System Performance Comparisons

2-Lamp System Performance 4' Fluorescent (4-lamp performance approximately 2x 2-lamp system)

		Electromagnetic E.S.	Standard - N	UltraMax - L	UltraMax - N	UltraMax N+	UltraMax - H
Watt-Miser T12CW	Watts:	74					
	BF:	0.9					
	Light:	100%					
	RLPW:	100%					
	LPW:	55					
F32T8 & F32T8/HL SPX	Watts:	69	58	48	53	61	73
	BF:	0.88	0.88	0.77	0.87	1.0	1.15
	Light:	120%	120%	105%	119%	136%	157%
	RLPW:	129%	153%	162%	166%	163%	159%
	LPW:	71	85	90	92	90	88
F32T8/WM SP	Watts:	Not Recommended	54	46	52	58	70
	BF:		0.88	0.77	0.87	1.0	1.15
	Light:		115%	100%	113%	130%	150%
	RLPW:		157%	161%	161%	166%	158%
	LPW:		87	90	90	92	88
F28T8/UMX UltraMax System SP	Watts:	Not Recommended	Not Recommended	43	48	54	66
	BF:			0.77	0.87	1.0	1.15
	Light:			97%	110%	126%	145%
	RLPW:			167%	169%	173%	162%
	LPW:			93	94	96	90

3-Lamp System Performance 4' Fluorescent

		Electromagnetic E.S.	Standard - N	UltraMax - L	UltraMax - N	UltraMax N+	UltraMax - H
Watt-Miser T12CW	Watts:	117					
	BF:	0.91					
	Light:	100%					
	RLPW:	100%					
	LPW:	53					
F32T8 & F32T8/HL SPX	Watts:	105	87	71	80	90	104
	BF:	0.88	0.88	0.77	0.87	1.0	1.18
	Light:	180%	119%	104%	117%	135%	155%
	RLPW:	127%	160%	171%	172%	175%	175%
	LPW:	70	85	91	91	93	93
F32T8/WM SP	Watts:	Not	81	68	76	86	100
	BF:	Recommended	0.88	0.77	0.87	1.0	1.18
	Light:		113%	99%	112%	129%	148%
	RLPW:		164%	171%	173%	175%	173%
	LPW:		87	91	92	93	92
F28T8/UMX UltraMax System SP	Watts:	Not		63	70	82	94
	BF:	Recommended	Recommended	0.77	0.87	1.0	1.18
	Light:			96%	108%	125%	143%
	RLPW:			178%	181%	178%	178%
	LPW			95	96	95	95

Ordering Guide and System Wattage

Starting	Ballast Factor	# Lamps	Product Code	Description	Input Voltage	F32T8 Input Watts: Input Watts	F32T8 In Fixture: Open	F32T8 In Fixture: Enclosed	F32T8/WM Input Watts: Input Watts	F32T8/WM In Fixture: Open	F32T8/WM In Fixture: Enclosed	F28T8 UMX: Input Watts	F32T8/25W: Input Watts
IS	L .77	1	72258	GE132MAX-L/Ultra	120	25	24	24	24	23	23	22	21
					277	25	24	24	24	23	23	22	21
IS	L .77	2	72262	GE232MAX-L/Ultra	120	49	49	48	47	47	46	43	38
					277	48	48	47	46	46	45	43	38
IS	L .77	3	78621	GE332MAX-L/Ultra	120	72	71	70	69	68	67	64	58
					277	71	70	69	68	67	66	63	57
IS	L .77	4	78625	GE432MAX-L/Ultra	120	97	95	93	92	90	88	86	77
					277	95	92	91	91	89	87	84	75
IS	N .87	1	72259	GE132MAX-N/Ultra	120	28	28	27	26	26	25	25	23
					277	28	28	27	26	26	25	25	23
IS	N .87	2	72266	GE232MAX-N/Ultra	120	54	54	53	53	52	51	49	44
					277	53	53	52	52	51	50	48	43
IS	N .87	3	78623	GE332MAX-N/Ultra	120	82	80	78	77	76	74	71	65
					277	80	78	77	76	74	73	70	64
IS	N .87	4	78627	GE432MAX-N/Ultra	120	108	102	101	102	98	95	94	87
					277	106	100	99	100	96	94	92	86
IS	N+ 1.0	2or1	71421	GE232MAX-N+	120	62			59			55	46
					277	61			58			54	46
IS	N+ 1.0	3	71422	GE332MAX-N+	120	91			87			83	68
					277	90			86			82	67
IS	N+ 1.0	4	71423	GE432MAX-N+	120	124			119			114	87
					277	121			117			112	86
IS	H 1.18	1	63855	GE132MAX-H/Ultra									
IS	H 1.18	2	73190	GE232MAX-H/Ultra	120	74	71	69	71	69	67	65	60
					277	73	70	68	70	68	66	64	60
IS	H 1.18	2or1	62718	GE232MAX480-H	480	73	70	68	68	66	64	64	59
IS	H 1.18	3	78619	GE332MAX-H/Ultra	120	106	105	102	102	100	95	95	90
					277	104	103	100	100	98	94	94	88
IS	H 1.18	3	62719	GE332MAX480-H	480	108	107	104	100	98	94	94	87
IS	H 1,18	4	71723	GE432MAX-H/Ultra	120	148	144	139	139	135	131	127	120
					277	145	141	136	136	132	128	125	116
IS	H 1.18	4	62720	GE432MAX480-H	480	144	140	135	134	130	126	125	115
IS	H 1.18	6or5	74117	GE632MAX-H90	120	221			205			187	178
					277	215			200			184	176

* All product codes listed are 10 packs

Starting	Ballast Factor	# Lamps	Product Code	Description	Input Voltage	F96T8 Input Watts	F96T8/WM Input Watts	F96T8/WM+	F96T8/WM (49W)
IS	N .87	1	49766	GE159MAX-N/Ultra	120	54	51	43	
					277	53	51	43	
IS	N .87	2	49767	GE259MAX-N/Ultra	120	108	104	98	88
					277	101	101	98	85
IS	L .77	2	73199	GE259MAX-L/Ultra	120	98	93	88	79
					277	94	91	84	75
IS	H 1.15	2or1	63888	GE286MAX0-HO-N (Multi-Volt ProLine)	120	142	135	124	111
					277	140	133	122	110

ULTRAMAX® High-Efficiency Electronic Ballast **L**

The Low watt option for maximum energy savings. With a ballast factor of. 77, the L line is the most energy efficient choice. It provides adequate illumination for most applications. For 1, 2, 3, and 4 T8 lamps in 2', 3', and 4' lengths.

ULTRAMAX® High-Efficiency Electronic Ballast **N**

The Normal light option balances efficiency and illumination. The most-used type of ballast, the N line saves energy without sacrificing lumens. A ballast factor of. 87 meets most application needs. For 1, 2, 3, and 4 T8 lamps in 2', 3', 4',and 8' lengths.

ULTRAMAX® High-Efficiency Electronic Ballast **N+**

The Normal-High light option at a 1.0 ballast factor is a perfect balance between efficiency and high light output. The N+ line is designed for high efficient high bay fixtures that use high reflectance materials to get more utilized light resulting in less watts needed. N+ also works perfectly when delamping standard F32T8 4 or 3 lamp N fixtures to 3 or 2 lamp High Lumen F32T8 N+ fixtures..

ULTRAMAX® High-Efficiency Electronic Ballast **H**

The choice for High light output. With a ballast factor of 1.18, UltraMax® H delivers the most lumens for maximum light or when you want more savings using fewer lamps. This is the first high-efficiency high-light output line for 2, 3 .and 4' T8 lamps.

Safety

- No PCBs
- UL Listed
  - UL 55C (131F) Max Ambient Rating
  - Class R Type 1
  - Type CC Anti-Arcing (120-277V)
  - Type HL (Hazardous Location)

Application Information

- Minimum Starting F32T8
  - Temperature: -22°F, -30°C
- Sound Rated A
- Remote Mounting F32T8:
  - 18' maximum lead length,
  - 18 AWG
  - Reduced wattage lamps 10'
- High Frequency Lamp Operation: Above 70 kHz

Physical Parameters

(all ballasts except the below)

Length:	9.50 in.
Width:	1.30 in.
Height:	1.2 in.
Weight:	1.06 lbs.

	4H	6H & 480V
Length:	9.50"	11.7"
Width:	1.70"	1.70"
Height:	1.20"	1.20"
Weight:	1.4 lbs.	2.0 lbs.

For additional product and application information, please consult GE's Website: www.gelighting.com