

LED Light Modules



1. LED Light Modules

Manufacturer	Description	Initial Lumens	CRI	CCT (K)	System Input Power (W)	B50 L70 Tc Max 75°C	Part Number
FRAEN	Fraen 42 LED Panel	4200	60	5700	42	-	FLE-042-001
Philips Lighting	Fortimo HBM 4000lm 641	4000	70	4000	40	50000	929000636503
	Fortimo HBM 4000lm 757	4000	70	5700	35	50000	929000636603
	Fortimo HBM 6000lm 641	6000	70	4000	59	50000	929000636703
	Fortimo HBM 6000lm 757	6000	70	5700	52	50000	929000636803

2. Power Solutions

Driver Module Solutions

Manufacturer	Region	Power (W)	V _{IN} (Vac)	V _{OUT} (Vdc)	I _{OUT} (mA)	Part Number
Inventronics	Worldwide	76	90-305	24	3170	EUV-076S024ST
		150	90-305	14-24	6300	HLG-150H-24 (CV)
Mean Well	Worldwide	60	90-295	24	2500	CLG-60-24
		100	120-277	3.5-24	4160	LEDINTA0024V41FO (CV)
		75	120-277	80-152	350-700	929000702302
Philips Lighting	Worldwide	150	120-277	125-280	350-700	929000702202

2. Connector Solutions

Manufacturer	Length (mm)	Description	Part Number
Philips Lighting	600	Fortimo LED HBM Cable	929000659803

NORTH AMERICA
1-888-LUXEON2 - Americas@FutureLightingSolutions.com

EUROPE, MIDDLE-EAST, AFRICA
00-800-44FUTURE - Europe@FutureLightingSolutions.com

www.FutureLightingSolutions.com

2012.03

ASIA
+800-Lumileds - Asia@FutureLightingSolutions.com

JAPAN
+81-0120-667-013 - Japan@FutureLightingSolutions.com

FUTURE
Lighting Solutions
Making LED Lighting Solutions Simple™

LED Application Feature:

Parking Lot Lights

Key Market Drivers



Reduced Energy Consumption

- Lower energy and running costs



Lower Maintenance Costs

- Longer lifetime eliminates the need for repeated relamping



Payback Period

- < 3 year payback period



Lighting Controls

- Remotely dim lights depending on time of day and vehicle occupancy sensors
- Lower energy costs
- Monitor fixture performance



Quality of Light

- Color rendering (60 - 80 CRI)
- Color in application
- Color consistency of LUXEON Rebel ES LEDs will remain within ANSI spec
- Best in class for lm/\$ and lm/W
- Best in class flux and efficacy
- Industry leading reliability and color consistency over time

FUTURE
Lighting Solutions
Making LED Lighting Solutions Simple™

www.FutureLightingSolutions.com



LEDs & System Components



1. High Power LUXEON® LEDs

Manufacturer	Product Family	Nominal CCT (K)	CCT Range (K)	Minimum CRI	Typical CRI	Min Flux (lumens)	Typ Flux (lumens)	Test Forward Current (mA)	Typical Efficacy (lm/W)	Part Number
Philips Lumileds	LUXEON Rebel ES	-	4500K - 10000	60	70	200	235	700	112	LXML-PWC2
		-	3500K - 4500	60	65	200	230	700	110	LXML-PWN2
		ANSI 4000	-	80	85	170	190	700	95	LXW8-PW40
		ANSI 5000	-	80	85	180	200	700	95	LXW8-PW50
		ANSI 4000	-	70	75	180	205	700	100	LXH7-PW40
		-	4500K - 10000	-	70	100	105	350	95	LXML-PWC1-0100
General Purpose	-	3500K - 4500	-	70	100	105	350	95	LXML-PWN1-0100	

2. Optical Solutions

Manufacturer	Description	Beam Angle (°)	Diameter (mm)	Part Number
Carclo-Optics	20mm Bubble Optic (120°)	120	19.7	10403*
	20mm Bubble Optic (130°)	130	19.7	10406*
	20mm Hemispherical (180°) Bubble Optic	180	19.7	10620*
	20mm Bubble Optic (120°)	120	19.7	10628*
Fraen	360° Side Emitting Lens	360	11	F360L-3-RE-0S
RENA	MR5 Side Emitting Lens	N/A	14.5	85618001

* Compatible with LUXEON Rebel ES

3. Power Solutions

Driver Module Solutions

Manufacturer	Region	Power (W)	V _{IN} (Vac)	V _{OUT} (Vdc)	I _{OUT} (mA)	0 - 10 V	Part Number
Inventronics	Worldwide	75	90-305	27-54	1400	✓	EUC-075S140DT
		76	90-305	24	3170		EUV-076S024ST
		76	90-305	48	1580		EUV-076S048ST
		96	90-305	48	2000		EUV-096S048ST
Mean Well	Worldwide	151.2	110-305	24	6300		HLG-150H-24A
		153.6	110-305	48	3200		HLG-150H-48A
Philips Lighting	Worldwide	100	120-277	24	4160		LEDINTA0024V41FO
		75	120-277	60-140	530		LEDINTA700C140F30
	100	120-277	60-140	700		LEDINTA700C140F30	
	150	120-277	120-425	350		LEDINTA0350C425FO	
	150	120-277	60-210	700		LEDINTA0700C210FO	
	150	120-277	120-425	350	✓	LEDINTA0350C425DO	
	150	120-277	120-280	530	✓	LEDINTA0530C280DO	
	150	120-277	60-210	700	✓	LEDINTA0700C210DO	
	Europe, Middle-East, Africa, Asia	150	120-277	120-425	350		913710850002
		150	120-277	60-210	700		913710859002

IC Solutions

Manufacturer	V _{IN} (Vdc)	V _{OUT} t _{YP} (Vdc)	I _{OUT} t _{YP} (mA)	Part Number
Diodes Inc.	6-54	60	550	ZXLD1356
	6-60	60	1000	ZXLD1366
	8-48	48	1000	AP8802
	8-60	60	1000	AP8802H
NXP	85-305*	48	3100	SSL4101t

* V_{IN} (Vac)

4. Lighting Controls

Wireless Communications

Manufacturer	Description	Part Number
Synapse Wireless	SNAP Lighting Site Controller (includes 1st year of SNAP Lighting Cloud Service)	LP400-001
	Annual fee for SNAP Lighting Cloud Service to remotely control or monitor up to 25 SNAP Lighting nodes	LP480-025
	Annual fee for SNAP Lighting Cloud Service to remotely control or monitor up to 100 SNAP Lighting nodes	LP480-100
	SNAP DIM-10 100-240 V for dimming and full on/off	LP001-001
	SNAP DIM-10 100-277 V for dimming and full on/off	LP002-001

Outdoor Controls Solutions

Manufacturer	Description	Part Number
Philips Lighting	Philips Dynadimmer 0 - 10V (North America)	LLC7230
	Philips Dynadimmer 1- 10 V SELV (EMEA & Asia)	LLC7220
	Philips Dynadimmer USB PC Cable (Global)	LCC7210

LED Light Engines



1. Light Engine Solutions

Manufacturer	Dimensions (mm)	LEDs	Lumen Output @ 350mA (lm)	Lumen Output @ 700mA (lm)	CCT (K)	CRI	Optics	Part Number
RENA	300 x 25	6	730	1300	5500	60	None	05702R999960200CXXX
	300 x 25	6	700	1235	4100	60	None	05702R777760200CXXX
	150 x 30	6	700	1235	4100	60	None	05705R777760200CXXX

2. Optical Solutions

Manufacturer	Beam Angle (°)	Diameter (mm)	Part Number
Carclo-Optics	120	19.7	10403
	130	19.7	10406
	180	19.7	10620
	120	19.7	10628

3. Power Solutions

Driver Module Solutions

Manufacturer	Region	Number of LEDs per Light Engine	Power (W)	V _{IN} (Vac)	V _{OUT} (Vdc)	I _{OUT} (mA)	0 - 10 V	Part Number
Harvard Engineering	Europe, Middle-East, Africa, Asia	6, 12	17	230	48	350		CL350-240-56V
		6, 12	33	230	48	700		CL700-240
Inventronics	Worldwide	18	25	90-305	72	350	✓	EUC-025S035DS
		18	50	90-305	72	700	✓	EUC-050S070DT
		24	40	90-305	114	350	✓	EUC-040S035DS
		24	75	90-305	108	700	✓	EUC-075S070DT
Mean Well	Worldwide	6, 12	17	90-264	48	350		LPC-20-350
		6, 12	34	90-264	48	700		LPC-35-700
Philips Lighting	North America	6	12	120	33	350		LED120A0350C33F
		6	17	120	24	700		LED120A0700C24F
	Europe, Middle-East, Africa, Asia	6	12	230	33	350		913700615882
		6	17	230	24	700		913700615982

4. Thermal Solutions

Manufacturer	Output Current	Description	Part Number
Aavid Thermalloy	350mA	300x30x6.6mm	634553B11811G
	350mA	150x19x6mm	700353B05906G
	700mA	300x32x42mm	652453B11811G
	700mA	300x32x42mm	652453B05906G

5. Connector Solutions

Manufacturer	Length	Description	Part Number
TE Connectivity	150mm	CT DOUBLE ENDED	1969343-5
	300mm	CT DOUBLE ENDED	1969343-6
	300mm	CT SINGLE END	1969336-3