

High Performance
LED Light Engines and Modules

MEGAMAN®

TECOH®



2017

Who We Are



Artificial light enhances the way we live and work. It brings us safety, comfort and productivity. MEGAMAN® is committed to providing light in a way that is truly sustainable, energy-saving and of such a quality that it brings a positive difference into the lives of all who use the company's innovative LED lighting solutions.

MEGAMAN® is proud to be the only major brand to have exclusively manufactured low-energy lighting products throughout its entire history, offering more than 20 years of industry expertise and innovation to the lighting market.

Beginning in 1994 with the highly successful production of CFL light sources, MEGAMAN® has evolved to become a complete low-energy lighting solutions provider. MEGAMAN® has built a reputation for producing high-performance LED light sources that offer a true replacement for traditional metal halide and halogen – combining quality lighting performance with substantial energy savings.

MEGAMAN® is now applying its market-leading experience to an even wider range of lighting solutions including revolutionary Smart Lighting control, a full range of components and a suite of low-energy fixtures.

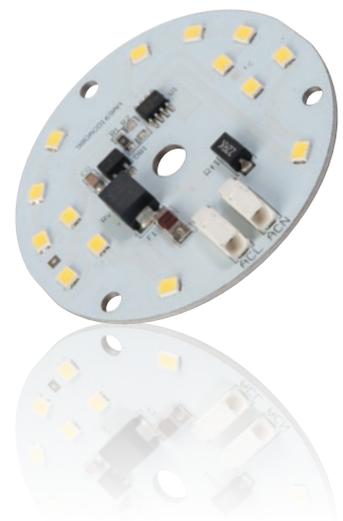
- The MEGAMAN® range now includes more than 400 high-quality light sources;
- MEGAMAN®'s TECOH® Light Engines and Modules range provides low-energy serviceable solutions for fixture makers worldwide;
- MEGAMAN® now offers Smart Lighting Control with *INGENIUM*® BLU and ZB – providing further energy saving potential by giving users full lighting control via their smart device;
- MEGAMAN® now offers a full suite of lighting solutions for both indoor and outdoor applications;
- MEGAMAN® operates in over 90 countries across Europe, Asia-Pacific, the Middle East, Africa, North and South America, the USA and Canada;
- Our advanced research and development facilities ensure a continuous supply of new and exciting energy-efficient lighting products come to market every year.

MEGAMAN® continues to play a lead role in combating climate change and carbon emissions by pursuing continuous innovation in the production of low-energy lighting solutions.

MEGAMAN® MILESTONES



- 2016 Introduction of Perfect White and *INGENIUM*® ZB technologies into TECOH® range
- 2015 Expansion of TECOH® range with TECOH® APx
- 2014 Launched first smart lighting range, *INGENIUM*® BLU
Industry first full range of Dim to Warm LED products
Widen TECOH® range with THx and DFx
- 2013 Expansion of the TECOH® offering with Zhaga style RDx and FLx modules
- 2012 Patented LED module - TECOH® MHx
TECOH® CFx – World's first 2000lm Zhaga Book2 Light Engine
- 2011 R9 technology introduced to LED range
The first NVLAP lab certification for LED products
- 2010 Launched the first MEGAMAN® LED Candle and Classic
International office for Professional Marketing opens in Europe
- 2009 Innovative Thermal Conductive Highway™ technology incorporated into MEGAMAN® LED reflectors
NVLAP lab certification for CFL products
- 2008 Amalgam technology is employed in full CFL range
- 2007 DIMMERABLE® technology introduced to CFL range
- 2005 DorS technology introduced to CFL range
Industry first RoHS compliant CFL
MEGAMAN® goes global, selling lamps in over 90 countries
- 2004 *INGENIUM*® technology is introduced to CFL lamps for long life and short preheating time
- 2002 Industry first CFL GU10 reflector launched
Introduced Silicone Protection technology to CFL range
- 1999 Patented Cooling-Tube technology introduced to CFL range
- 1997 Industry first candle-shaped CFL launched
- 1996 Industry first classic-shaped CFL launched
- 1994 MEGAMAN® incorporated



Rigorous Quality and Management Systems

All MEGAMAN® products are designed, tested and produced in our own factories in Xiamen, China. Standards have been implemented factory-wide to ensure the MEGAMAN® manufacturing processes deliver innovative, reliable and safe products with high-quality standards now and in the future.

To ensure that MEGAMAN® products comply with the highest quality standards, company manufacturing plants are equipped with their own assembly lines. The in-house laboratory is ISO 17025 certified by CNAS and NVLAP, and is eligible to perform on-site testing for Intertek, TÜV Rheinland, UL and Energy Star.

The MEGAMAN® business runs under the most stringent management and quality systems. The green elements of the production process are maximised, employee welfare is prioritised and the company is socially responsible to the local community. To continually develop these areas, MEGAMAN® has undertaken a range of international accreditations. These include:

Quality Management System

MEGAMAN® products are manufactured and certified to ISO 9001:2008, ISO 14001:2004, ISO 14064-1:2006, OHSAS 18001:2007, SA 8000:2008 and QC 080000:2012.

Corporate Social Responsibility

MEGAMAN® has received OHSAS 18001:2007 and SA 8000:2008, confirming the level of care for employees and reinforcing the company's pledge to be socially responsible.

Controlling the Use of Hazardous Substances

Controlling the use of hazardous substances MEGAMAN® plants are QC 080000 certified, underlining the fact that company manufacturing processes are closely monitored to ensure ultimate control of hazardous substances.

Product Quality Assurance

MEGAMAN® products are made using premium quality materials and innovative technologies within stringent control measures, to deliver maximum performance and energy efficiencies.



CNAS



NVLAP



ISO 9001



ISO 14001



ISO14064-1



OHSAS 18001



SA 8000



QC080000



TECOH[®] — the New Technology

The MEGAMAN[®] TECOH[®] LED portfolio consists of a range of high performance LED Light Engines (LLE's) and modules.

TECOH[®] comes in different shapes, sizes and lumen packages to address a wide range of different applications. The range includes socketable and non-socketable solutions with either integrated (LED Light Engine) or non-integrated (module) electronic driver.

TECOH[®] CFx (socketable with integrated electronic driver)

MEGAMAN[®]'s TECOH[®] CFx range of high performance twist-lock LED Light Engines has an integrated driver for general lighting. The TECOH[®] CFx range is designed in line with Zhaga Specification Book 2. MEGAMAN[®]'s TECOH[®] CFx light engines are intended to be used in downlights for general lighting applications such as hotel lobbies, restaurants, supermarkets, reception area's and many more. With nominal lumen packages of 1200 and 2000 lumen, TECOH[®] CFx LLE's are developed as energy efficient LED alternatives for conventional light sources such as 50W halogen and 2 x 13W and 2 x 18W compact fluorescent lamps.

MEGAMAN[®]'s TECOH[®] CFx CF0120 versions are the world's first 2000 lumen LED Light Engines designed in line with Zhaga Specification Book 2.

TECOH[®] RDx (non-socketable for remote electronic driver)

The TECOH[®] RDx are round disc LED modules which are non-socketable and require an external electronic driver.

The TECOH[®] RDx modules are designed in line with Zhaga Interface Specification Book 3 and offer lumen packages of 1086 up to 19163lm at Tc = 25°C with efficacies up to 177lm/W, all in the compact size.

These high performance compact round disc modules are ideal for use in spotlight fixtures, track-, down- and floodlighting. Suitable for or a wide variety of applications such as accent and display lighting, show-window lighting but also in illumination of reception areas, hotel lobbies, galleries and restaurants.

TECOH[®] FLx (non-socketable for remote electronic driver)

The MEGAMAN[®] TECOH[®] FLx is a range of rectangular shaped LED modules designed, where available, in line with Zhaga Interface Specification Book 7. TECOH[®] FLx have efficacies up to 170lm/W resulting in energy classes A++.

These high performance linear modules are a perfect energy efficient alternatives for conventional fluorescent tubes.

TECOH[®] FLx can be used in general lighting applications such as, but not limited too, direct lighting in offices, schools, meeting rooms, corridors and many more.

TECOH[®] DFx (socketable for remote electronic driver)

TECOH[®] DFx are compact, rectangular shaped LED modules specially designed for ambient lighting. Different luminaire shapes and sizes can be addressed by using single or by connecting multiple units.

DFx modules can be used behind diffusers as a flexible, long lasting and highly efficient alternative to traditional compact fluorescent and circular fluorescent lighting.

TECOH[®] PLx (non-socketable for remote electronic driver)

The TECOH[®] PLx are hand-shaped LED modules. These highly efficient modules are the ideal fluorescent alternatives for flat luminaires with diffuse covers.

PLx modules are self-cooling and so do not need specially designed heat-sinks for reliable operation.

TECOH®

the New Technology



TECOH® APx (non-socketable with integrated electronic driver)

TECOH® APx is an LED light engine with on board driver for easy installation. TECOH® APx operates directly from the mains. This LLE option allows a LED upgrade in fixtures lacking space for external driver integration.

TECOH® THx (non-socketable with integrated and remote electronic driver options)

TECOH® THx modules and LED Light Engines offer an alternative to the higher energy consuming PAR16, AR111 and MR16 halogen products. All solutions have optics built-in, some versions even have the driver built into the LLE to allow an easy tough unique upgrade to highly efficient LED lighting. The unique construction prevents mis-use by retrofitting high energy consuming halogen products.

TECOH® RLx (non-socketable for remote electronic driver)

The TECOH® RLx are round shaped constant current LED modules mainly intended for general lighting applications. The modules are to be used with a diffuse cover. The RLx modules allows for cost competitive LED upgrades.

AEROPOSTALE



LED MODULES

- TECOH® FLx
- TECOH® PLx
- TECOH® DFx
- TECOH® THx
- TECOH® RLx
- TECOH® RDx



LED MODULES

TECOH® FLx

The MEGAMAN® rectangular-shaped TECOH® FLx is a perfect replacement for fluorescent lights

Designed as a perfect replacement for conventional fluorescent lighting in new luminaires, the MEGAMAN® TECOH® FLx is a rectangular-shaped range of LED modules. Where applicable, the modules are designed in line with the Zhaga Interface Specification Book 7. Different lumen packages and sizes are available for different lighting installations and combinations. The lengths of 280mm or 560mm can be mixed and matched to make up to the regular fluorescent tube lengths of 0.6m, 1.2m and 1.5m.

As the perfect alternative for fluorescent lamps to be used in linear and flat luminaires with diffuse covers, this innovative LED module is used in a wide range of general lighting applications such as direct lighting in offices, schools, meeting rooms, corridors, supermarkets and manufacturing halls, and so on. Some of its attractive features include:

Product Features

- Highly efficient lighting solutions with energy label A+ and A++ and efficacies up to 170lm/W
- Long lamp life of 50,000 hours
- Simple interconnection of the LED modules makes them a flexible solution suitable for continuous line configurations without gaps and dark zones
- Designed to operate on standard 700mA constant current drivers
- Wide range of operating temperatures from -30°C to +50°C
- Capable of linear dimming from 100% to 1% when used with a DC1-10V dimming driver and DC1-10V dimmer
- Self-cooling modules that do not need specially designed heat-sinks
- RichColour range available with Ra90
- Colour consistency is ≤ 3 SDCM

Range extended with

- High output versions up to 4400 lumen
- 8mm FLx modules for application in sidelit panels
- Tunable white FLx colour changing modules capable of following the circadian rhythm



LED MODULES

TECOH[®] FLx



Powered by LED Driver

Dimmable¹

SDCM
≤3

High Efficacy Range (Gen3) - in 20mm width

Product Code	Input Current (mA)	Nominal Voltage (V DC)	Wattage (W)	Luminous Flux at Tc 25°C (lm)	Luminous Efficacy at Tc 25°C (lm/W)	Luminous Flux at Tc 85°C (lm)	Luminous Efficacy at Tc 85°C (lm/W)	Colour Temp. [CRI]	Life Time at L70 B10 and Tc 85°C (hrs)	Length (mm)	Width ² (mm)	Height (mm)	Energy Label	No. of LED
FL3506/830-L28W2	700	5.9	4.1	630	154	610	149	3000K [Ra80]	50000	280	20	6.7	A++	10
FL3506/840-L28W2	700	5.9	4.1	660	161	640	156	4000K [Ra80]	50000	280	20	6.7	A++	10
FL3413/830-L56W2	700	11.3	7.9	1255	159	1220	154	3000K [Ra80]	50000	560	20	6.7	A++	20
FL3413/840-L56W2	700	11.3	7.9	1320	167	1280	162	4000K [Ra80]	50000	560	20	6.7	A++	20
FL3513/830-L28W2	700	11.3	7.9	1255	159	1220	154	3000K [Ra80]	50000	280	20	6.7	A++	20
FL3513/840-L28W2	700	11.3	7.9	1320	167	1280	162	4000K [Ra80]	50000	280	20	6.7	A++	20
FL3426/830-L56W2	700	22.1	15.5	2510	162	2440	157	3000K [Ra80]	50000	560	20	6.7	A++	40
FL3426/840-L56W2	700	22.1	15.5	2635	170	2560	165	4000K [Ra80]	50000	560	20	6.7	A++	40

High Efficacy Range - in 20mm width

Product Code	Input Current (mA)	Nominal Voltage (V DC)	Wattage (W)	Luminous Flux at Tc 25°C (lm)	Luminous Efficacy at Tc 25°C (lm/W)	Luminous Flux at Tc 85°C (lm)	Luminous Efficacy at Tc 85°C (lm/W)	Colour Temp. [CRI]	Life Time at L70 B10 and Tc 85°C (hrs)	Length (mm)	Width ² (mm)	Height (mm)	Energy Label	No. of LED
FL0305v2/830-L28W2	700	6	4	513	128	500	125	3000K [Ra80]	50000	280	20	6.7	A++	10
FL0305v2/840-L28W2	700	6	4	563	141	525	138	4000K [Ra80]	50000	280	20	6.7	A++	10
FL0411/830-L56W2	700	12	8	1025	128	1000	125	3000K [Ra80]	50000	560	20	6.7	A++	20
FL0411/840-L56W2	700	12	8	1125	141	1100	138	4000K [Ra80]	50000	560	20	6.7	A++	20
FL0311/830-L28W2	700	12	8	1025	128	1000	125	3000K [Ra80]	50000	280	20	6.7	A++	20
FL0311/840-L28W2	700	12	8	1125	141	1100	138	4000K [Ra80]	50000	280	20	6.7	A++	20
FL0422/830-L56W2	700	24	16	2050	128	2000	125	3000K [Ra80]	50000	560	20	6.7	A+	40
FL0422/840-L56W2	700	24	16	2250	141	2200	138	4000K [Ra80]	50000	560	20	6.7	A++	40

¹ A dimming feature is available and performance can be enhanced by driver choice.

² Other width feasible upon request.

TECOH® FLx



Powered by LED Driver

Dimmable¹

SDCM
≤3

Standard Range in 20mm width

Product Code	Input Current (mA)	Nominal Voltage (V DC)	Wattage (W)	Luminous Flux at Tc 25°C (lm)	Luminous Efficacy at Tc 25°C (lm/W)	Luminous Flux at Tc 85°C (lm)	Luminous Efficacy at Tc 85°C (lm/W)	Colour Temp. [CRI]	Life Time at L70 B10 and Tc 85°C (hrs)	Length (mm)	Width ² (mm)	Height (mm)	Energy Label	No. of LED
FL0305v3/830-L28W2	700	6.25	4.4	475	109	450	103	3000K [Ra80]	50000	280	20	6.7	A++	10
FL0305v3/840-L28W2	700	6.25	4.4	500	115	475	109	4000K [Ra80]	50000	280	20	6.7	A++	10
FL0410v2/830-L56W2	700	12.5	8.7	950	109	900	103	3000K [Ra80]	50000	560	20	6.7	A+	20
FL0410v2/840-L56W2	700	12.5	8.7	1000	115	950	109	4000K [Ra80]	50000	560	20	6.7	A+	20
FL0310v2/830-L28W2	700	12.5	8.7	950	109	900	103	3000K [Ra80]	50000	280	20	6.7	A+	20
FL0310v2/840-L28W2	700	12.5	8.7	1000	115	950	109	4000K [Ra80]	50000	280	20	6.7	A+	20
FL0420/830-L56W2	700	25	17.4	1900	109	1800	103	3000K [Ra80]	50000	560	20	6.7	A+	40
FL0420/840-L56W2	700	25	17.4	2000	115	1900	109	4000K [Ra80]	50000	560	20	6.7	A+	40

High Efficacy RichColour Range in 20mm width

Product Code	Input Current (mA)	Nominal Voltage (V DC)	Wattage (W)	Luminous Flux at Tc 25°C (lm)	Luminous Efficacy at Tc 25°C (lm/W)	Luminous Flux at Tc 85°C (lm)	Luminous Efficacy at Tc 85°C (lm/W)	Colour Temp. [CRI]	Life Time at L70 B10 and Tc 85°C (hrs)	Length (mm)	Width ² (mm)	Height (mm)	Energy Label	No. of LED
FL0305v2R9/930-L28W2	700	6	4	450	113	440	110	3000K [>Ra90]	50000	280	20	6.7	A++	10
FL0305v2R9/940-L28W2	700	6	4	495	124	485	121	4000K [>Ra90]	50000	280	20	6.7	A++	10
FL0411R9/930-L56W2	700	12	8	900	113	880	110	3000K [>Ra90]	50000	560	20	6.7	A++	20
FL0411R9/940-L56W2	700	12	8	990	124	970	121	4000K [>Ra90]	50000	560	20	6.7	A++	20
FL0311R9/930-L28W2	700	12	8	900	113	880	110	3000K [>Ra90]	50000	280	20	6.7	A++	20
FL0311R9/940-L28W2	700	12	8	990	124	970	121	4000K [>Ra90]	50000	280	20	6.7	A++	20
FL0422R9/930-L56W2	700	24	16	1800	113	1760	110	3000K [>Ra90]	50000	560	20	6.7	A+	40
FL0422R9/940-L56W2	700	24	16	1980	124	1940	121	4000K [>Ra90]	50000	560	20	6.7	A++	40

¹ A dimming feature is available and performance can be enhanced by driver choice.

² Other width feasible upon request.



Powered by LED Driver

Dimmable¹SDCM
≤3

350mA Operation

Product Code	Input Current (mA)	Nominal Voltage (V DC)	Wattage (W)	Luminous Flux at Tc 25°C (lm)	Luminous Efficacy at Tc 25°C (lm/W)	Luminous Flux at Tc 65°C (lm)	Luminous Efficacy at Tc 65°C (lm/W)	Colour Temp. [CRI]	Life Time at L70 B10 and Tc ≤ 70°C (hrs)	Length (mm)	Width ² (mm)	Height (mm)	Energy Label	No. of LED
FL4832/840-L56W23.8	350	63.7	22.5	3390	151	3180	141	4000K [Ra80]	50000	559.7	23.8	6.7	A++	44

Dimmable¹SDCM
≤4

Special Lengths

Product Code	Input Current (mA)	Nominal Voltage (V DC)	Wattage (W)	Luminous Flux at Tc 25°C (lm)	Luminous Efficacy at Tc 25°C (lm/W)	Luminous Flux at Tc 85°C (lm)	Luminous Efficacy at Tc 85°C (lm/W)	Colour Temp. [CRI]	Life Time at L70 B10 and Tc 85°C (hrs)	Length (mm)	Width ² (mm)	Height (mm)	Energy Label	No. of LED
FL5935/840-L84W2	390	54	21	3600	170	3300	157	4000K [Ra80]	50000	840	20	6.7	A++	120
FL6032/840-L112W2.4	360	83	30	3300	110	3200	107	4000K [Ra80]	50000	1120	24	6.7	A+	58
FL6142/840-L140W2.4	360	97	35	4300	123	4200	120	4000K [Ra80]	50000	1400	24	6.7	A++	68
FL6258/840-L112W2.4	360	125	45	6000	133	5800	130	4000K [Ra80]	50000	1120	24	6.7	A++	180
FL6379/840-L140W2.4	360	167	60	8100	135	7900	130	4000K [Ra80]	50000	1400	24	6.7	A++	240
FL5744/842-L112W2	800	34	27.4	4500	164	4050	148	4000K [Ra80]	50000	1119	20	6.7	A++	96
FL5855/840-L140W2	1000	34	34	5600	165	5100	150	4000K [Ra80]	50000	1398	20	6.7	A++	120

¹ A dimming feature is available and performance can be enhanced by driver choice.² Other width feasible upon request.

TECOH® FLx



Powered by LED Driver

Dimmable¹SDCM
≤3

High Output Range in 40mm width

Product Code	Input Current (mA)	Nominal Voltage (V DC)	Wattage (W)	Luminous Flux at Tc 25°C (lm)	Luminous Efficacy at Tc 25°C (lm/W)	Luminous Flux at Tc 85°C (lm)	Luminous Efficacy at Tc 85°C (lm/W)	Colour Temp. [CRI]	Life Time at L70 B10 and Tc 85°C (hrs)	Length (mm)	Width ² (mm)	Height (mm)	Energy Label	No. of LED
FL0922/830-L28W4	700	24	16	2050	128	2000	125	3000K [Ra80]	50000	280	40	6.7	A++	20
FL0922/840-L28W4	700	24	16	2250	141	2200	138	4000K [Ra80]	50000	280	40	6.7	A++	20
FL1044/830-L56W4	700	48	32	4100	128	4000	125	3000K [Ra80]	50000	560	40	6.7	A++	80
FL1044/840-L56W4	700	48	32	4500	141	4400	138	4000K [Ra80]	50000	560	40	6.7	A++	80

Tunable White Range in 280mm/560mm length and 40mm width

Product Code	Input Current (mA)	Nominal Voltage for 1 Channel Only (V DC)	Nominal Voltage for 2 Channels (V DC)	Wattage for 1 Channel Only (W)	Wattage for 2 Channels (W)	Luminous Flux at Tc 25°C (lm)	Luminous Efficacy at Tc 25°C (lm/W)	Luminous Flux at Tc 85°C (lm)	Luminous Efficacy at Tc 85°C (lm/W)	Colour Temp. [CRI]	Life Time at L70 B10 and Tc 85°C (hrs)	Length (mm)	Width (mm)	Height (mm)	Energy Label	No. of LED
FL0722/828-L28W4	700	12	24	8	16	1125	141	1100	138	2800K [Ra80]	50000	280	40	6.7	A++	20
FL0722/865-L28W4	700	12	24	8	16	1125	141	1100	138	6500K [Ra80]	50000	280	40	6.7	A++	20
FL0722/828-865-L28W4	700	12	24	8	16	2250	141	2200	138	4000K [Ra80] ³	50000	280	40	6.7	A++	40
FL0844/828-L56W4	700	24	48	16	32	2250	141	2200	138	2800K [Ra80]	50000	560	40	6.7	A++	40
FL0844/865-L56W4	700	24	48	16	32	2250	141	2200	138	6500K [Ra80]	50000	560	40	6.7	A++	40
FL0844/828-865-L56W4	700	24	48	16	32	4500	141	4400	138	4000K [Ra80] ⁴	50000	560	40	6.7	A++	80

¹ A dimming feature is available and performance can be enhanced by driver choice.

² Other width feasible upon request.

³ CCT range 2800K to 6500K is at min. 1100lm. Max. luminous flux at full power is 2200lm and 4000K listed.

⁴ CCT range 2800K to 6500K is at min. 2200lm. Max. luminous flux at full power is 4400lm and 4000K listed.



Powered by LED Driver

Dimmable¹

SDCM
≤3

Multiple Operation Range in 8mm width for Sidelite Applications

Product Code	Input Current (mA)	Nominal Voltage (V DC)	Wattage (W)	Luminous Flux at Tc 25°C (lm)	Luminous Efficacy at Tc 25°C (lm/W)	Luminous Flux at Tc 65°C (lm)	Luminous Efficacy at Tc 65°C (lm/W)	Colour Temp. [CRI]	Life Time at L70 B10 and Tc 85°C (hrs)	Length (mm)	Width (mm)	Height (mm)	Energy Label	No. of LED
FL1814M/830-L57W0.8	350	30	10	1450	145	1350	135	3000K [Ra80]	50000	570	8	2.4	A++	70
	500	30	14.5	1900	131	1800	124	3000K [Ra80]	50000	570	8	2.4	A++	70
FL1814M/840-L57W0.8	350	30	10	1500	150	1400	140	4000K [Ra80]	50000	570	8	2.4	A++	70
	500	30	14.5	1950	134	1850	128	4000K [Ra80]	50000	570	8	2.4	A++	70
FL1814M/930-L57W0.8	350	30	10	1150	115	1100	110	3000K [Ra90]	50000	570	8	2.4	A+	70
	500	30	14.5	1600	110	1550	107	3000K [Ra90]	50000	570	8	2.4	A+	70

Narrow off-centre Boards for Sidelite Applications

Product Code	Input Current (mA)	Nominal Voltage (V DC)	Wattage (W)	Luminous Flux at Tc 25°C (lm)	Luminous Efficacy at Tc 25°C (lm/W)	Luminous Flux at Tc 65°C (lm)	Luminous Efficacy at Tc 65°C (lm/W)	Colour Temp. [CRI]	Life Time at L70 B10 and Tc 85°C (hrs)	Length (mm)	Width (mm)	Height (mm)	Energy Label	No. of LED
FL3118/840-L58W0.85	450	28.5	12.8	1900	148	1800	141	4000K [Ra80]	50000	580	8.5	6.7	A++	60
FL3118/850-L58W0.85	450	28.5	12.8	1900	148	1800	141	5000K [Ra80]	50000	580	8.5	6.7	A++	60
FL3120/840-L58W0.85	350	43	15	2050	137	1950	130	4000K [Ra80]	50000	580	8.5	6.7	A++	75

LED Constant Current Converter



LD0212x1v-C350
(Input current: 350mA)
FL1814M/830-L57W0.8
FL1814M/840-L57W0.8
FL1814M/930-L57W0.8

LD0219x1v-C500
(Input current: 500mA)
FL1814M/830-L57W0.8
FL1814M/840-L57W0.8
FL1814M/930-L57W0.8

¹ A dimming feature is available and performance can be enhanced by driver choice.

LED MODULES

TECOH[®] DFx

The MEGAMAN[®] compact rectangular TECOH[®] DFx specially designed for flexibility in ambient lighting

The TECOH[®] DFx is a rectangular-shaped LED module offering a high quality white light. To be used with diffusers as an alternative to traditional compact and circular fluorescent lighting, its lambertian distribution makes the TECOH[®] DFx perfect for ambient lighting applications.

The TECOH[®] DFx is a socketable solution, which means easy installation with no tools required. Single or multiple units can be used together to address installations of different shapes and sizes.

TECOH[®] DFx modules offer further flexibility through two output modes (High Efficiency and High Output) which can be changed by simply amending the input current.

Product Features

- Linear structured module compatible with BJB holder for easy installation
- Industry highest efficacy of 145lm/W
- Low power and voltage consumption allowing serial connection of up to 9 pcs and still being SELV compliant
- Flexible solution to cover wide range of diffuser based luminaires (round, square, small, large,...)
- Energy saving alternative to traditional compact and circular fluorescent lighting
- Dimmable versions available





LED MODULES TECOH[®] DFx



Powered by LED Driver

Dimmable¹ SDCM ≤4

Product Code	Input Current (mA)	Nominal Voltage (V DC)	Wattage (W)	Luminous Flux at Tc 25°C (lm)	Luminous Efficacy at Tc 25°C (lm/W)	Luminous Flux at Tc 65°C (lm)	Luminous Efficacy at Tc 65°C (lm/W)	Colour Temp. [CRI]	Life Time at L70 B10 (hrs)	Length (mm)	Width (mm)	Height (mm)	Energy Label
DF0103.5M/830	350	6.2	2	270	128	255	121	3000K [Ra80]	50000	50	7	1.55	A++
	500	6.2	3	340	113	320	107	3000K [Ra80]	50000	50	7	1.55	A++
DF0103.5M/840	350	6.2	2	290	138	270	129	4000K [Ra80]	50000	50	7	1.55	A++
	500	6.2	3	365	122	340	113	4000K [Ra80]	50000	50	7	1.55	A++

¹ A dimming feature is available and performance can be enhanced by driver choice.

LED MODULES

TECOH[®] RLx

The TECOH[®] RLx are round shaped constant current LED modules mainly intended for general lighting applications

The TECOH[®] RLx are designed as energy efficient LED alternatives for conventional light sources such as halogen and compact fluorescent products in new luminaires.

Different lumen packages are available in the same size and with the same fixing holes allowing for multifunctional fixture design and flexible stocking.

The TECOH[®] RLx modules are to be used in combination with diffuse covers for optimum performance. The RLx range allows for cost competitive LED upgrades.

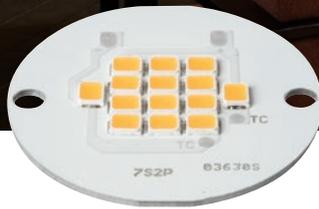
Product Features

- Energy efficient alternative to CFL and halogen in general lighting applications
- Long lamp life (L70 B10 at Tc 75°C) of 30,000 hours
- Different lumen packages with same size module and same fixing holes for flexibility
- High colour rendition of up to Ra82
- Colour consistency is ≤ 4 SDCM
- Operating temperature : -30°C to +40°C
- Dimmable





LED MODULES TECOH[®] RLx



1



2

Powered by LED Driver

Dimmable¹ SDCM ≤4

Product Code	Input Current (mA)	Nominal Voltage (V DC)	Wattage (W)	Luminous Flux at Tc 25°C (lm)	Luminous Efficacy at Tc 25°C (lm/W)	Luminous Flux at Tc 85°C (lm)	Luminous Efficacy at Tc 85°C (lm/W)	Colour Temp. [CRI]	Life Time at L70 B10 and Tc 75°C (hrs)	Diameter (mm)	Height (mm)	Energy Label	Product Photo
RL0107/830	350	22	8	870	109	790	99	3000K [Ra80]	30000	34	2.4	A+	1
RL0216/830	700	22	15	1750	117	1600	107	3000K [Ra80]	30000	34	2.4	A+	2

¹ A dimming feature is available and performance can be enhanced by driver choice.

LED MODULES

TECOH® RDx

TECOH® RDx offers excellent lumen packages of up to 19163lm*

The TECOH® RDx are round disc LED modules that are non-socketable and require an external electronic driver. Together, the module and driver form the LED Light Engine.

The TECOH® RDx have extreme high module efficacies up to 177lm/W*.

The TECOH® RDx modules are designed in line with Zhaga Interface Specification Book 3 and offer lumen packages of 1086 up to 19163 lumen* with just 20 models and 4 LES diameters.

These high-performance compact round disc modules are ideal for use in spotlight fixtures, tracklighting, downlighting and floodlighting a wide variety of applications, such as accent and display lighting, and show window lighting, as well as for the illumination of reception areas, hotel lobbies, galleries and restaurants.

Product Features

- Designed in line with Zhaga Interface Specification Book 3, enabling interchangeability and easy integration into fixtures
- High thermal (increased Tc limit of max. 85°C) and optical performance, enabling efficient and compact fixture designs
- Perfect White and Ultra RichColour options available for excellent colour rendering
- Packages from 1086 up to 19163 lumens* for multifunctional fixture design
- Small LES (11.2-24.5mm) for excellent beam control
- Modules designed for screw or screw-less mounting
- High efficient lighting solutions with an energy label of A++ when operated in High efficiency mode and normal mode
- Long lamp life (L70 B10) of up to 50,000 hours
- Colour consistency is ≤ 3 SDCM
- Operating temperature: -30°C to +40°C



* The rated luminous flux is declared at case temperature (Tc) 25°C.
Please visit www.megamantecoh.com for the latest information on the TECOH® family.

LED MODULES

TECOH[®] RDx Gen 3



Powered by LED Driver

Dimmable ¹

SDCM
3

40mm

LES
11.2mm

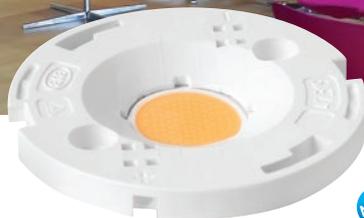
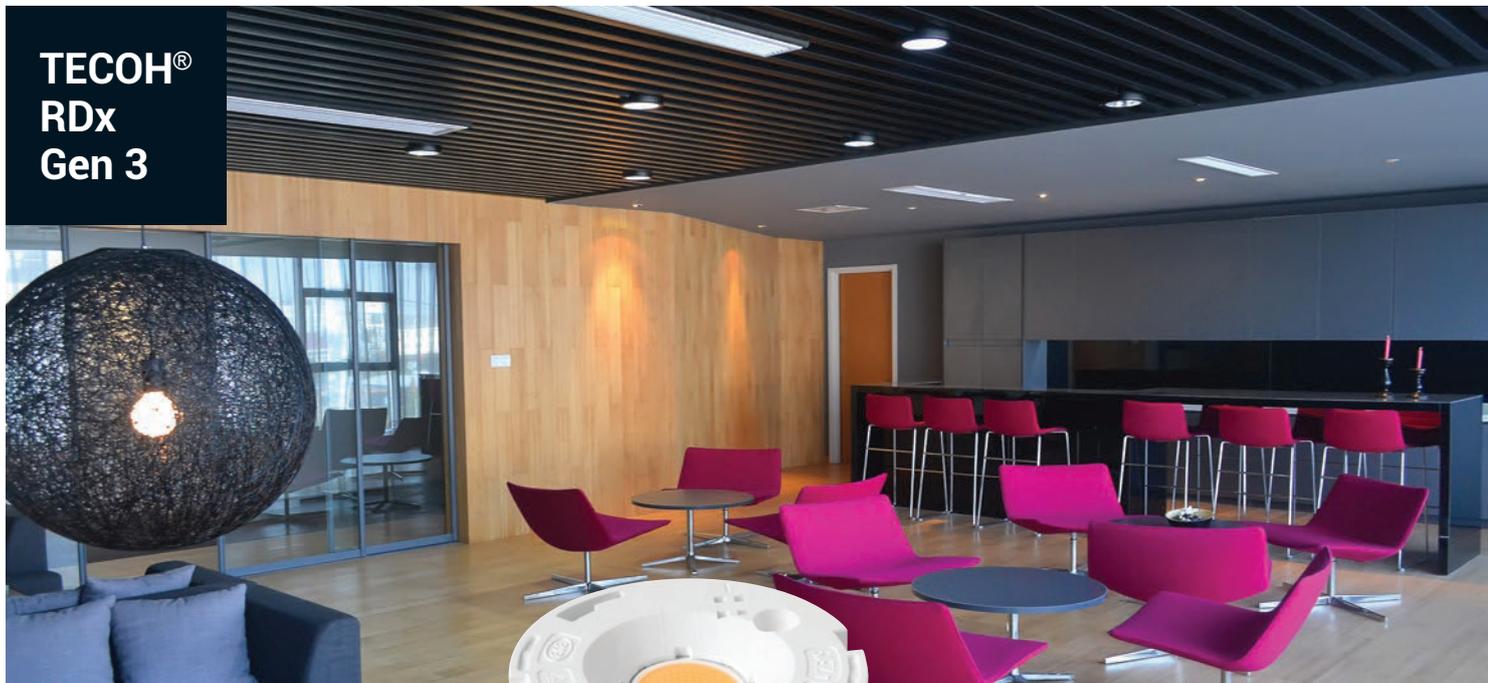
4.8mm

Standard CRI										
Product Code	Input Current (mA)	Typical Voltage at Tc 85°C (V DC)	Typical Wattage at Tc 85°C (W)	Luminous Flux at Tc 25°C (lm)	Module Efficacy at Tc 25°C (lm/W)	Luminous Flux at Tc 85°C (lm)	Module Efficacy at Tc 85°C (lm/W)	Colour Temp. [CRI]	Life Time at L70 B10 and Tc 85°C (hrs)	Energy Label
RD0200-0287-C0690v0+830	270	34	9.2	1422	155	1270	138	3000K [Ra80]	50000	A++
	690	37.6	25.9	3136	121	2800	108	3000K [Ra80]	50000	A+
RD0200-0287-C0690v0+840	270	34	9.2	1456	159	1300	142	4000K [Ra80]	50000	A++
	690	37.6	25.9	3214	124	2870	111	4000K [Ra80]	50000	A+
RD0201-0375-C0920v0+830	360	34	12.2	1854	151	1655	135	3000K [Ra80]	50000	A++
	920	37.6	34.6	4088	118	3650	106	3000K [Ra80]	50000	A+
RD0201-0375-C0920v0+840	360	34	12.2	1904	156	1700	139	4000K [Ra80]	50000	A++
	920	37.6	34.6	4194	121	3745	108	4000K [Ra80]	50000	A+

Preliminary data

¹ A dimming feature is available and performance can be enhanced by driver choice.

**TECOH®
RDx
Gen 3**



NEW

Powered by LED Driver

Dimmable ¹ SDCM 3 50mm LES 17mm 5mm

Standard CRI											
Product Code	Input Current (mA)	Typical Voltage at Tc 85°C (V DC)	Typical Wattage at Tc 85°C (W)	Luminous Flux at Tc 25°C (lm)	Module Efficacy at Tc 25°C (lm/W)	Luminous Flux at Tc 85°C (lm)	Module Efficacy at Tc 85°C (lm/W)	Colour Temp. [CRI]	Life Time at L70 B10 and Tc 85°C (hrs)	Energy Label	Product Photo
RD0202-0488-C1150v0+830	450	34	15.3	2419	158	2160	141	3000K [Ra80]	50000	A++	1
	1150	37.6	43.2	5331	123	4760	110	3000K [Ra80]	50000	A+	1
RD0202-0488-C1150v0+840	450	34	15.3	2481	162	2215	145	4000K [Ra80]	50000	A++	1
	1150	37.6	43.2	5471	127	4885	113	4000K [Ra80]	50000	A+	1
RD0203-0579-C1380v0+830	540	34	18.4	2873	156	2565	140	3000K [Ra80]	50000	A++	1
	1380	37.6	51.9	6322	122	5645	109	3000K [Ra80]	50000	A+	1
RD0203-0579-C1380v0+840	540	34	18.4	2951	161	2635	144	4000K [Ra80]	50000	A++	1
	1380	37.6	51.9	6485	125	5790	112	4000K [Ra80]	50000	A+	1
RD0204-0756-C1840v0+830	720	34	24.5	3763	154	3360	137	3000K [Ra80]	50000	A++	1
	1840	37.6	69.2	8254	119	7370	107	3000K [Ra80]	50000	A+	1
RD0204-0756-C1840v0+840	720	34	24.5	3858	158	3445	141	4000K [Ra80]	50000	A++	1
	1840	37.6	69.2	8473	122	7565	109	4000K [Ra80]	50000	A+	1

Preliminary data

¹ A dimming feature is available and performance can be enhanced by driver choice.

TECOH®
RDx
Gen 3



Dimmable ¹ SDCM 3 50mm LES 24.5mm 5mm

Powered by LED Driver

Standard CRI											
Product Code	Input Current (mA)	Typical Voltage at Tc 85°C (V DC)	Typical Wattage at Tc 85°C (W)	Luminous Flux at Tc 25°C (lm)	Module Efficacy at Tc 25°C (lm/W)	Luminous Flux at Tc 85°C (lm)	Module Efficacy at Tc 85°C (lm/W)	Colour Temp. [CRI]	Life Time at L70 B10 and Tc 85°C (hrs)	Energy Label	Product Photo
RD0205-1173-C2760v0+830	1080	34	36.7	5835	159	5210	142	3000K [Ra80]	50000	A++	2
	2760	37.6	103.8	12807	123	11435	110	3000K [Ra80]	50000	A+	2
RD0205-1173-C2760v0+840	1080	34	36.7	5986	163	5345	146	4000K [Ra80]	50000	A++	2
	2760	37.6	103.8	13138	127	11730	113	4000K [Ra80]	50000	A+	2
RD0206-1711-C2760v0+830	1080	51.1	55.2	8551	155	7635	138	3000K [Ra80]	50000	A++	2
	2760	56.4	155.7	18682	120	16680	107	3000K [Ra80]	50000	A+	2
RD0206-1711-C2760v0+840	1080	51.1	55.2	8758	159	7820	142	4000K [Ra80]	50000	A++	2
	2760	56.4	155.7	19163	123	17110	110	4000K [Ra80]	50000	A+	2

Preliminary data

¹ A dimming feature is available and performance can be enhanced by driver choice.



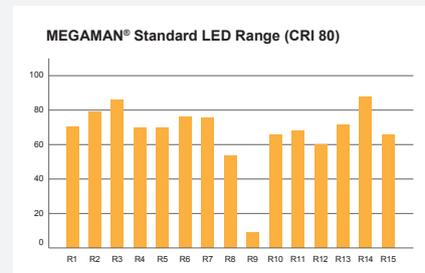
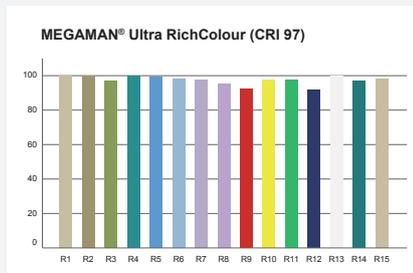
**TECOH®
RDx
Gen 3**

Powered by LED Driver

Ra97
Dimmable¹
SDCM
3
40mm
LES
11.2mm
4.8mm

Ultra RichColour										
Product Code	Input Current (mA)	Typical Voltage at Tc 85°C (V DC)	Typical Wattage at Tc 85°C (W)	Luminous Flux at Tc 25°C (lm)	Module Efficacy at Tc 25°C (lm/W)	Luminous Flux at Tc 85°C (lm)	Module Efficacy at Tc 85°C (lm/W)	Colour Temp. [CRI]	Life Time at L70 B10 and Tc 85°C (hrs)	Energy Label
RD0200-0287/ru-C0690v0+930	270	34	9.2	1086	118	970	106	3000K [Ra97]	50000	A+
	690	37.6	25.9	2402	93	2145	83	3000K [Ra97]	50000	A
RD0200-0287/ru-C0690v0+940	270	34	9.2	1114	121	995	108	4000K [Ra97]	50000	A+
	690	37.6	25.9	2458	95	2195	85	4000K [Ra97]	50000	A
RD0201-0375/ru-C0920v0+930	360	34	12.2	1422	116	1270	104	3000K [Ra97]	50000	A+
	920	37.6	34.6	3136	91	2800	81	3000K [Ra97]	50000	A
RD0201-0375/ru-C0920v0+940	360	34	12.2	1478	121	1320	108	4000K [Ra97]	50000	A+
	920	37.6	34.6	3214	93	2870	83	4000K [Ra97]	50000	A

MEGAMAN® Ultra RichColour technology provides high color rendering of up to Ra97 to optimize both the hue and saturation of colors.



Preliminary data

¹ A dimming feature is available and performance can be enhanced by driver choice.

TECOH®
RDx
Gen 3



NEW

Powered by LED Driver



Ultra RichColour										
Product Code	Input Current (mA)	Typical Voltage at Tc 85°C (V DC)	Typical Wattage at Tc 85°C (W)	Luminous Flux at Tc 25°C (lm)	Module Efficacy at Tc 25°C (lm/W)	Luminous Flux at Tc 85°C (lm)	Module Efficacy at Tc 85°C (lm/W)	Colour Temp. [CRI]	Life Time at L70 B10 and Tc 85°C (hrs)	Energy Label
RD0202-0488/ru-C1150v0+930	450	34	15.3	1854	121	1655	108	3000K [Ra97]	50000	A+
	1150	37.6	43.2	4088	95	3650	84	3000K [Ra97]	50000	A
RD0202-0488/ru-C1150v0+940	450	34	15.3	1904	124	1700	111	4000K [Ra97]	50000	A+
	1150	37.6	43.2	4189	97	3740	86	4000K [Ra97]	50000	A
RD0203-0579/ru-C1380v0+930	540	34	18.4	2201	120	1965	107	3000K [Ra97]	50000	A+
	1380	37.6	51.9	4844	93	4325	83	3000K [Ra97]	50000	A
RD0203-0579/ru-C1380v0+940	540	34	18.4	2257	123	2015	110	4000K [Ra97]	50000	A+
	1380	37.6	51.9	4967	96	4435	85	4000K [Ra97]	50000	A
RD0204-0756/ru-C1840v0+930	720	34	24.5	2884	118	2575	105	3000K [Ra97]	50000	A+
	1840	37.6	69.2	6328	91	5650	82	3000K [Ra97]	50000	A
RD0204-0756/ru-C1840v0+940	720	34	24.5	2957	121	2640	108	4000K [Ra97]	50000	A+
	1840	37.6	69.2	6490	94	5795	84	4000K [Ra97]	50000	A

Preliminary data

¹ A dimming feature is available and performance can be enhanced by driver choice.



**TECOH®
RDx
Gen 3**

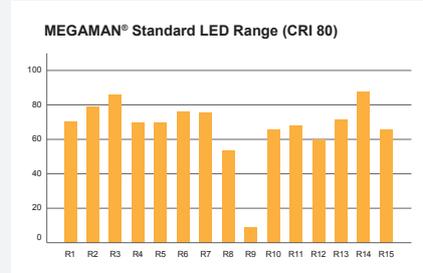
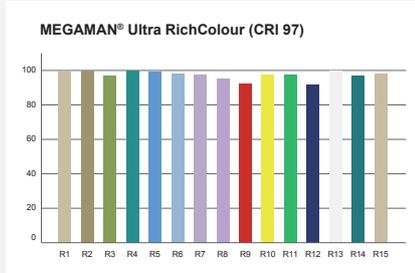
NEW

Powered by LED Driver

Ra97
Dimmable¹
SDCM 3
50mm
LES 24.5mm
5mm

Ultra RichColour											
Product Code	Input Current (mA)	Typical Voltage at Tc 85°C (V DC)	Typical Wattage at Tc 85°C (W)	Luminous Flux at Tc 25°C (lm)	Module Efficacy at Tc 25°C (lm/W)	Luminous Flux at Tc 85°C (lm)	Module Efficacy at Tc 85°C (lm/W)	Colour Temp. [CRI]	Life Time at L70 B10 and Tc 85°C (hrs)	Energy Label	Product Photo
RD0205-1173/ru-C2760v0+930	1080	34	36.7	4474	122	3995	109	3000K [Ra97]	50000	A+	1
	2760	37.6	103.8	9817	95	8765	84	3000K [Ra97]	50000	A	1
RD0205-1173/ru-C2760v0+940	1080	34	36.7	4586	125	4095	112	4000K [Ra97]	50000	A+	1
	2760	37.6	103.8	10063	97	8985	87	4000K [Ra97]	50000	A	1
RD0206-1711/ru-C2760v0+930	1080	51.1	55.2	6546	119	5845	106	3000K [Ra97]	50000	A+	1
	2760	56.4	155.7	14325	92	12790	82	3000K [Ra97]	50000	A	1
RD0206-1711/ru-C2760v0+940	1080	51.1	55.2	6709	122	5990	109	4000K [Ra97]	50000	A+	1
	2760	56.4	155.7	14678	94	13105	84	4000K [Ra97]	50000	A	1

MEGAMAN® Ultra RichColour technology provides high color rendering of up to Ra97 to optimize both the hue and saturation of colors.



Preliminary data

¹ A dimming feature is available and performance can be enhanced by driver choice.



TECOH®
RDx
Gen 2



Dimmable ¹ SDCM ≤3 50mm LES 17mm 6.2mm

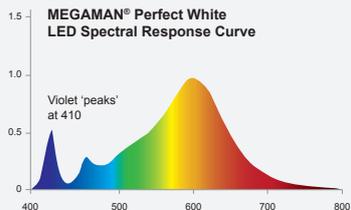
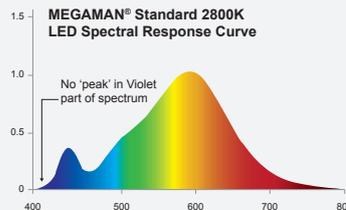
Powered by LED Driver

Product Code	Input Current (mA)	Typical Voltage at Tc 85°C (V DC)	Typical Wattage at Tc 85°C (W)	Luminous Flux at Tc 25°C (lm)	Module Efficacy at Tc 25°C (lm/W)	Luminous Flux at Tc 85°C (lm)	Module Efficacy at Tc 85°C (lm/W)	Colour Temp. [CRI]	Life Time at L70 B10 and Tc 85°C (hrs)	Energy Label
RD0121M/830	350	34.6	12.1	1690	140	1400	116	3000K [Ra82]	50000	A++
	500	35.4	17.7	2290	129	1900	107	3000K [Ra82]	50000	A+
	700	36.2	25.3	2890	114	2400	95	3000K [Ra82]	50000	A+
RD0121M/840	350	34.6	12.1	1870	155	1550	128	4000K [Ra82]	50000	A++
	500	35.4	17.7	2530	143	2100	119	4000K [Ra82]	50000	A++
	700	36.2	25.3	3200	126	2650	105	4000K [Ra82]	50000	A+
RD0231M/830	500	34.6	17.3	2530	146	2100	121	3000K [Ra82]	50000	A++
	700	34.8	24.4	3370	138	2800	115	3000K [Ra82]	50000	A++
	1050	35.2	37	4400	119	3650	99	3000K [Ra82]	50000	A+
RD0231M/840	500	34.6	17.3	2770	160	2300	133	4000K [Ra82]	50000	A++
	700	34.8	24.4	3740	153	3100	127	4000K [Ra82]	50000	A++
	1050	35.2	37	4820	130	4000	108	4000K [Ra82]	50000	A+
RD0231M-p/830 	700	35.5	25	2550	102	2150	86	3000K [Ra82]	50000	A+



MEGAMAN® Perfect White

technology offers retailers a distinct advantage enhancing textiles by bringing whites to life while still offering superb efficacy and energy efficiency, compared to traditional light sources. It is ideally suited for retail lighting as well as other accent and display applications.



LED Constant Current Converter



LD0212x1v-C350
(Input current: 350mA)
RD0121M/830
RD0121M/840

LD0219x1v-C500
(Input current: 500mA)
RD0121M/830
RD0121M/840
RD0231M/830
RD0231M/840

LD0225x1v-C700
(Input current: 700mA)
RD0121M/830 RD0231M/830
RD0121M/840 RD0231M/840
RD0231M-p/830



LD0445x1-C1050
(Input current: 1050mA)
RD0231M/830
RD0231M/840

¹ A dimming feature is available and performance can be enhanced by driver choice.

**TECOH®
RDx
Gen 2**



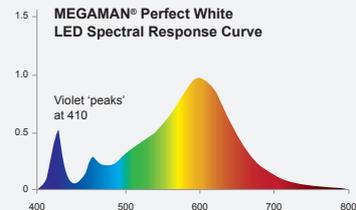
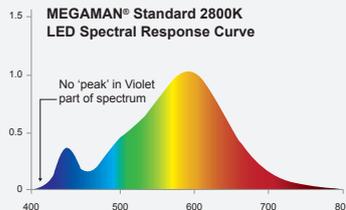
Dimmable ¹ SDCM ≤3 50mm LES 19mm 6.2mm

Powered by LED Driver

Product Code	Input Current (mA)	Typical Voltage at Tc 85°C (V DC)	Typical Wattage at Tc 85°C (W)	Luminous Flux at Tc 25°C (lm)	Module Efficacy at Tc 25°C (lm/W)	Luminous Flux at Tc 85°C (lm)	Module Efficacy at Tc 85°C (lm/W)	Colour Temp. [CRI]	Life Time at L70 B10 and Tc 85°C (hrs)	Energy Label
RD0343M/830	700	33.2	23.2	3675	158	3050	131	3000K [Ra82]	50000	A++
	1050	33.6	35.3	4940	140	4100	116	3000K [Ra82]	50000	A++
	1400	34	47.6	5900	124	4900	103	3000K [Ra82]	50000	A+
RD0343M/840	700	33.2	23.2	4095	177	3400	147	4000K [Ra82]	50000	A++
	1050	33.6	35.3	5420	154	4500	127	4000K [Ra82]	50000	A++
	1400	34	47.6	6500	137	5400	113	4000K [Ra82]	50000	A++
RD0555M/830	1050	42	44.1	6020	137	5000	113	3000K [Ra82]	50000	A++
	1400	44.1	61.7	7590	123	6300	102	3000K [Ra82]	50000	A+
RD0555M/840	1050	42	44.1	6620	150	5500	125	4000K [Ra82]	50000	A++
	1400	44.1	61.7	8310	135	6900	112	4000K [Ra82]	50000	A++
RD0555M-p/830	700	43	30.5	3350	110	2900	95	3000K [Ra82]	50000	A+



MEGAMAN® Perfect White technology offers retailers a distinct advantage enhancing textiles by bringing whites to life while still offering superb efficacy and energy efficiency, compared to traditional light sources. It is ideally suited for retail lighting as well as other accent and display applications.



LED Constant Current Converter



LD0425x1-C700
(Input current: 700mA)
RD0343M/830
RD0343M/840
RD0555M-p/830

LD0445x1-C1050
(Input current: 1050mA)
RD0555M/830
RD0555M/840

LD0436x1-C1050
(Input current: 1050mA)
RD0343M/830
RD0343M/840

LD0448x1-C1400
(Input current: 1400mA)
RD0343M/830
RD0343M/840

¹ A dimming feature is available and performance can be enhanced by driver choice.



LED MODULES

TECOH® PLx

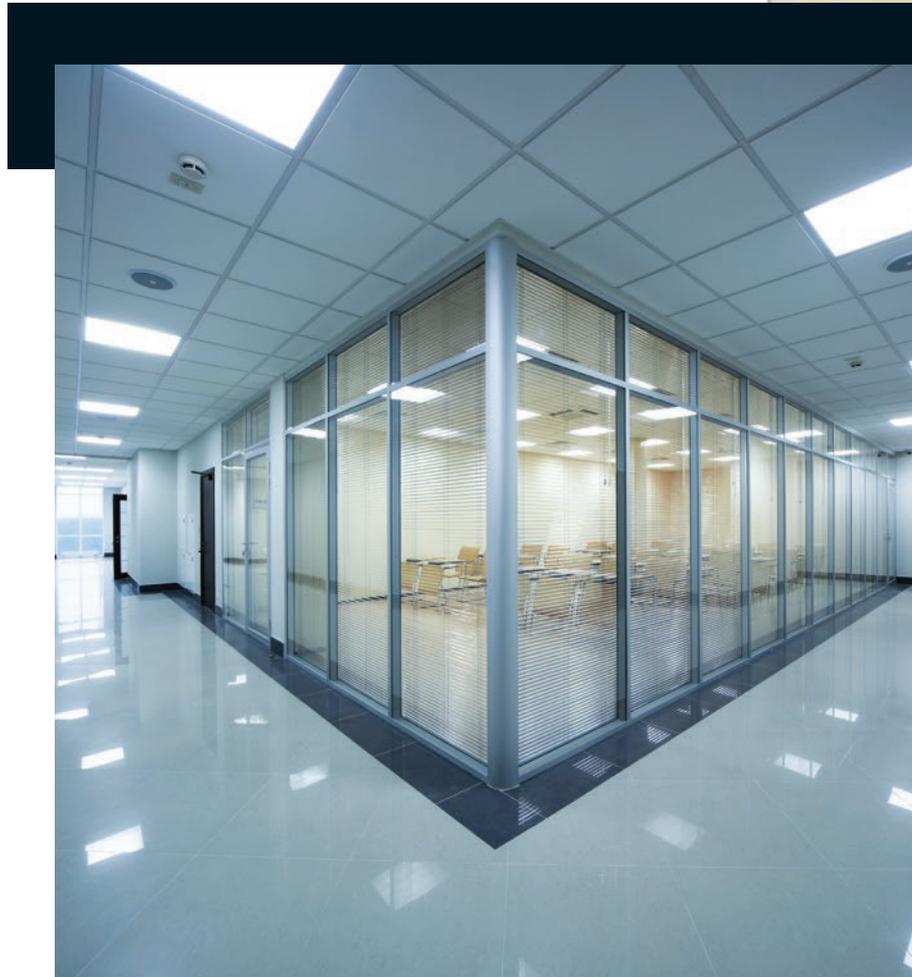
The MEGAMAN® TECOH® PLx is a hand-shaped module that is a perfect alternative to fluorescent lights

The finger or tile shaped TECOH® PLx modules are designed for use in flat luminaires with diffuse covers. PLx modules are ideal for general lighting, replacing conventional T5/T8 lights in office and commercial applications. Its excellent thermal performance leads to greater durability and long lifetimes.

The TECOH® PLx's square shape offers smooth, unbroken light and allows easy design-in into existing luminaire shapes.

Product Features

- Modules using standard constant current driver of 350mA and 700mA
- High efficacy modules have industry highest A++ energy class
- Simple mechanical and electrical interconnection to offer different lumen packages
- 100 – 1% linear dimming capable when used with DC1-10V dimmer
- Self-cooling: No need for additional heat-sink
- Easy installation for standard panel designs

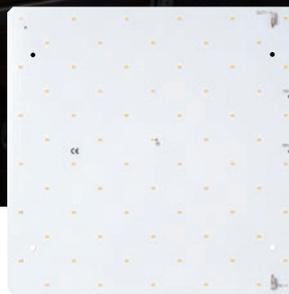


LED MODULES

TECOH[®] PLx



1



2

Powered by LED Driver

Dimmable

SDCM
≤3

Finger Module															
Product Code	Input Current (mA)	Nominal Voltage (V DC)	Wattage (W)	Luminous Flux at Tc 25°C (lm)	Luminous Efficacy at Tc 25°C (lm/W)	Luminous Flux at Tc 65°C (lm)	Luminous Efficacy at Tc 65°C (lm/W)	Colour Temp. [CRI]	Life Time at L70 B10 and Tc 85°C (hrs)	Length (mm)	Width (mm)	Height (mm)	Energy Label	No. of LED	Product Photo
PL0111/830-L25W23	700	12	8	1000	125	900	113	3000K [Ra80]	50000	259	236	6.7	A++	64	1
PL0111/840-L25W23	700	12	8	1120	140	1000	125	4000K [Ra80]	50000	259	236	6.7	A++	64	1

Tile Module															
Product Code	Input Current (mA)	Nominal Voltage (V DC)	Wattage (W)	Luminous Flux at Tc 25°C (lm)	Luminous Efficacy at Tc 25°C (lm/W)	Luminous Flux at Tc 45°C (lm)	Luminous Efficacy at Tc 45°C (lm/W)	Colour Temp. [CRI]	Life Time at L70 B10 and Tc 45°C (hrs)	Length (mm)	Width (mm)	Height (mm)	Energy Label	No. of LED	Product Photo
PL0317/840-L27W27	350	32	11.3	1780	153	1730	158	4000K	50000	270	270	5.6	A++	66	2

¹ A dimming feature is available and performance can be enhanced by driver choice.

LED MODULES

TECOH® THx

TECOH® THx constant current modules offer an excellent alternative to AR111, MR16 and PAR 16 halogen products

The built-in optics and heat-sink simplify the upgrade to a high efficient LED solution.

Building on the success of our patented Thermal Conductive Highway™ (TCH) technology, MEGAMAN® is proud to offer a new range of products with a groundbreaking hybrid reflector.

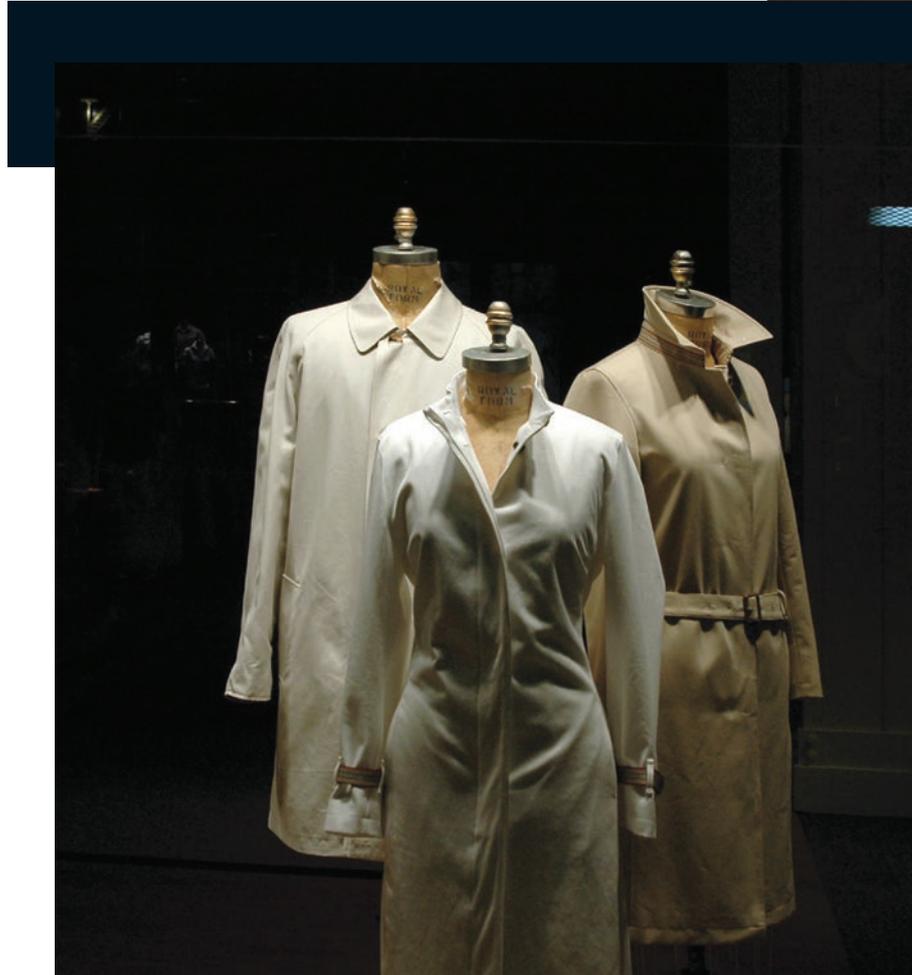
Offering enhanced beam control and efficacy, MEGAMAN®'s hybrid reflector combines the best features MEGAMAN®'s popular faceted reflector range with the total internal reflection of our optical reflector to provide a solution that performs even better than competing LED technologies.

Avoiding the 'showerhead' look of multiple lens solutions, the hybrid reflector is still able to take advantage of the precise beam control of the parabolic reflector approach, while minimising spill light, reducing glare and eliminating the 'visual noise' of multiple lens arrays.

MEGAMAN®'s hybrid reflector technology also combines superior performance, with beautiful aesthetics – barely distinguishable from the much-loved and familiar look of a halogen reflector, but with far higher efficiency.

Product Features

- Ideal for recessed and surface mounted spotlights
- A dimming feature is available and the performance can be enhanced by the driver choice
- Long lamp life (L70 B10 at Tc 85°C) of 50,000 hours



LED MODULES TECOH® THx



Powered by LED Driver

Dimmable¹

SDCM
≤6

Product Code	Input Current (mA)	Nominal Voltage (V DC)	Wattage (W)	Luminous Flux (lm)	Luminous Efficacy (lm/W)	Luminous Flux in 90° Cone (lm)	Beam Angle (°)	Max. Luminous Intensity (cd)	Colour Temp. [CRI]	Life Time at L70 B10 and Tc 85°C (hrs)	Diameter (mm)	Height (mm)	Dimmable	Energy Label	Product Photo
TH0405-36D/828	350	19	6.5	500	77	350	36	1200	2800K [Ra82]	50000	50	30	Dimmable	A	1
TH0405-36D/840	350	19	6.5	500	77	350	36	1200	4000K [Ra85]	50000	50	30	Dimmable	A	1
TH0406-36D/828	350	19	6.5	630	97	500	36	1500	2800K [Ra82]	50000	50	30	Dimmable	A+	1
TH0406-36D/840	350	19	6.5	630	97	500	36	1500	4000K [Ra85]	50000	50	30	Dimmable	A+	1
TH0406R9-36D/928	350	17	6	520	87	400	36	1200	2800K [Ra95]	50000	50	30	Dimmable	A+	1
TH0406R9-36D/940	350	17	6	520	87	400	36	1200	4000K [Ra92]	50000	50	30	Dimmable	A+	1
TH0406R9-24D/928	350	17	6	520	87	400	24	2000	2800K [Ra95]	50000	50	30	Dimmable	A+	1
TH0406R9-24D/940	350	17	6	520	87	400	24	2000	4000K [Ra92]	50000	50	30	Dimmable	A+	1
TH0520-15D/830	700	35	25	2000	80	1840	15	17800	3000K [>Ra80]	50000	111	92	Dimmable	A	2
TH0520-15D/840	700	35	25	2000	80	1840	15	17800	4000K [>Ra80]	50000	111	92	Dimmable	A	2
TH0520-24D/830	700	35	25	2000	80	1840	24	10200	3000K [>Ra80]	50000	111	92	Dimmable	A	2
TH0520-24D/840	700	35	25	2000	80	1840	24	10200	4000K [>Ra80]	50000	111	92	Dimmable	A	2
TH0520-45D/830	700	35	25	2000	80	1840	45	4450	3000K [>Ra80]	50000	111	92	Dimmable	A	2
TH0520-45D/840	700	35	25	2000	80	1840	45	4450	4000K [>Ra80]	50000	111	92	Dimmable	A	2
TH0532-24D/830	1050	33	35	3200	91	2940	24	16300	3000K [>Ra80]	50000	111	92	Dimmable	A+	2
TH0532-24D/840	1050	33	35	3200	91	2940	24	16300	4000K [>Ra80]	50000	111	92	Dimmable	A+	2
TH0532-45D/830	1050	33	35	3200	91	2940	45	7100	3000K [>Ra80]	50000	111	92	Dimmable	A+	2
TH0532-45D/840	1050	33	35	3200	91	2940	45	7100	4000K [>Ra80]	50000	111	92	Dimmable	A+	2
TH0532-60D/830	1050	33	35	3200	91	2940	60	4000	3000K [>Ra80]	50000	111	92	Dimmable	A+	2
TH0532-60D/840	1050	33	35	3200	91	2940	60	4000	4000K [>Ra80]	50000	111	92	Dimmable	A+	2

LED Constant Current Converter



LD0425x1-C700

TH0520-15D/830
TH0520-15D/840
TH0520-24D/830
TH0520-24D/840
TH0520-45D/830
TH0520-45D/840

LD0436x1-C1050

TH0532-24D/830
TH0532-24D/840
TH0532-45D/830
TH0532-45D/840
TH0532-60D/830
TH0532-60D/840



LD0509x1d-C350

TH0405-36D/828
TH0405-36D/840
TH0406-36D/828
TH0406-36D/840
TH0406R9-36D/928
TH0406R9-36D/940
TH0406R9-24D/928
TH0406R9-24D/940

¹ A dimming feature is available and performance can be enhanced by driver choice.

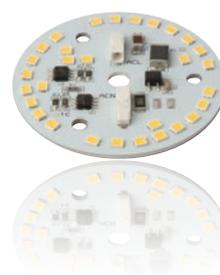


LED LIGHT ENGINES

• TECOH® CFx

• TECOH® APx

• TECOH® THx



LED LIGHT ENGINES

TECOH® CFx

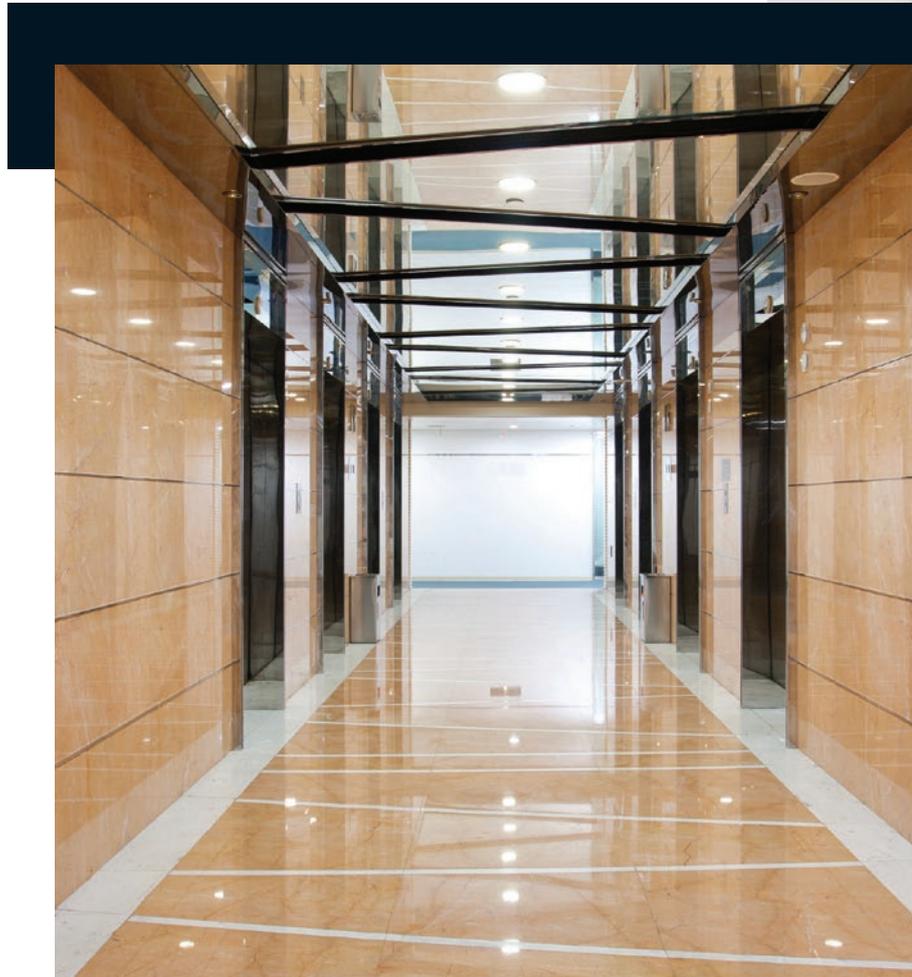
The world's first 2000 lumen LED light engines designed in line with Zhaga Specification Book 2

The MEGAMAN® TECOH® CFx range of high performance twist-lock LED Light Engines (LLE) has an integrated driver for general lighting. The TECOH® CFx range is designed in line with Zhaga Specification Book 2. The TECOH® CFx is available in two options – the high-efficiency range and the extended life dimmable range.

The MEGAMAN® TECOH® CFx LLEs are intended for use in downlights for general lighting applications, such as hotel lobbies, restaurants, supermarkets and reception areas. With nominal lumen packages of 1200 and 2000 lumen, the TECOH® CFx LLEs are developed as energy efficient LED alternatives for conventional light sources such as the 50W halogen, and the 2 x 13W and 2 x 18W compact fluorescent lamps.

Product Features

- Perfect alternative to CFL non-integrated and halogen lamps in general lighting applications
- Designed in line with Zhaga Interface Specification Book 2, enabling interchangeability and easy integration into fixtures
- Twist-lock design with integrated driver that allows easy installation directly on mains input
- Offers different lumen packages in the same compact size, allowing for multifunctional fixture design and flexible stocking
- Smooth Lambertian output
- Future-proof design, enabling easy upgrading
- High efficiency range that offers system efficacies of up to 80lm/W
- The extended life dimmable range offers 100% to 10% linear dimming feature
- Robust design results in high reliability, L70 B10 of up to 35,000 hours
- Operating temperature: -30°C to +40°C
- For operation in Class I luminaires only



LED LIGHT ENGINES TECOH[®] CFx



220-240V | Line Voltage

Dimmable ¹

SDCM
≤5

Extended Life Dimmable Range

Product Code	Wattage (W)	Luminous Flux (lm)	Luminous Flux in 120° Cone	Luminous Efficacy (lm/W)	Luminous Intensity (cd)	Colour Temp. [CRI]	Life Time at L70 B10 and Tc 65°C (hrs)	Diameter (mm)	Height (mm)	Dimmable	Energy Label
CF0212d/PHJ65d-2-828-230V	15	1200	960	80	650	2800K [Ra80]	35000	70	41	100-10% ¹	A
CF0212d/PHJ65d-2-840-230V	15	1200	960	80	650	4000K [Ra80]	35000	70	41	100-10% ¹	A
CF0220d/PHJ65d-2-828-230V	24	2000	1600	83	1050	2800K [Ra80]	35000	70	41	100-10% ¹	A
CF0220d/PHJ65d-2-840-230V	24	2000	1600	83	1050	4000K [Ra80]	35000	70	41	100-10% ¹	A

For use in Class I luminaires only.

¹ Capable of linear dimming from 100% to 10% when working with conventional leading edge dimmers. Please visit www.megaman.cc/user-guide for a list of compatible dimmers.

LED LIGHT ENGINES

TECOH® APx

The MEGAMAN® TECOH® APx light engine works directly on AC mains supply

TECOH® APx is a Planar LED light engine which works directly on AC mains supply. This driver-on-board module allows for easy installation and wiring.

TECOH® APx is an AC replacement for use behind a diffuser in a wide range of general lighting fixtures. Ideal for designers who are looking for a single substrate LED engine. The modules can easily be fitted into fixtures or onto heat-sinks without the need for additional drivers.

This driver-on-board light engine offers a solution in shallow luminaires that lack the space to integrate an external driver.

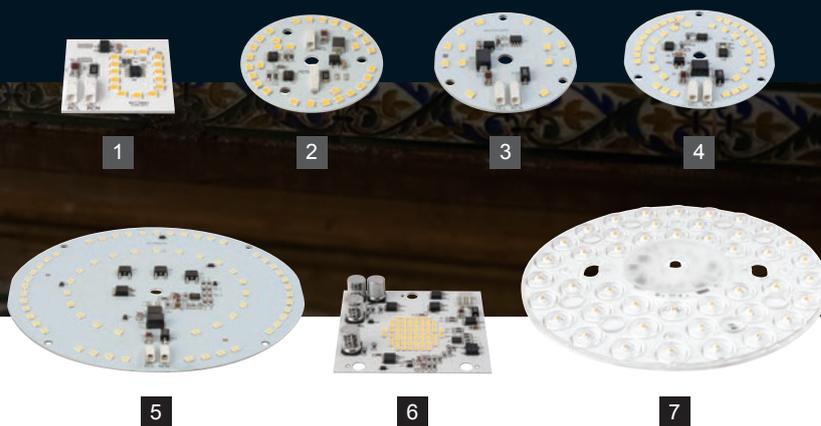
Product Features

- Single substrate LED Light Engine with driver integrated on-board for operation directly on mains supply
- Ideal for flat luminaires lacking space for driver integration
- Easy installation: No external driver needed
- Handy electrical connection to the mains through BJB connector
- Allows trouble free upgrade to LED
- Different fixture shapes and sizes can be addressed using single or multiple units
- Low flicker range offers reduced flicker below 30%



LED LIGHT ENGINES

TECOH[®] APx



220-240V | Line Voltage

SDCM
≤4

Standard Range											
Product Code	Wattage (W)	Luminous Flux at Tc 25°C (lm)	Luminous Efficacy at Tc 25°C (lm/W)	Luminous Flux at Tc 75°C (lm)	Luminous Efficacy at Tc 75°C (lm/W)	Colour Temp.[CRI]	Life Time at L70 B50 and Tc 75°C (hrs)	Dimension (mm)	Power Factor	Energy Label	Product Photo
AP0106/830-230V	9	680	76	630	70	3000K [Ra80]	50000	L40 x W40 x H5.6	>0.9	A+	1
AP0106/840-230V	9	700	78	650	72	4000K [Ra80]	50000	L40 x W40 x H5.6	>0.9	A+	1
AP0211/840-230V	12	1200	100	1100	92	4000K [Ra80]	50000	Ø60 x H5.9	>0.9	A+	2
AP0907/840-230V	9.5	750	79	700	74	4000K [Ra80]	50000	Ø60 x H6.9	>0.9	A+	3
AP1014/840-230V	18	1490	83	1400	78	4000K [Ra80]	50000	Ø60 x H6.9	>0.9	A	3
AP1121/840-230V	27	2180	81	2100	78	4000K [Ra80]	50000	Ø70 x H6.9	>0.9	A	4
AP1235/840-230V	35	3800	109	3500	100	4000K [Ra80]	50000	Ø140 x H6.9	>0.9	A+	5
AP1355/840-230V	48.5	5950	123	5500	113	4000K [Ra80]	50000	Ø140 x H6.9	>0.9	A+	5

Low Flicker Range											
Product Code	Wattage (W)	Luminous Flux at Tc 25°C (lm)	Luminous Efficacy at Tc 25°C (lm/W)	Luminous Flux at Tc 75°C (lm)	Luminous Efficacy at Tc 75°C (lm/W)	Colour Temp.[CRI]	Life Time at L70 B50 and Tc 75°C (hrs)	Dimension (mm)	Power Factor	Energy Label	Product Photo
AP0536LF/840-230V	35	3900	111	3600	102	4000K [Ra80]	50000	L80 x W80 x H15	>0.9	A+	6

With Ultra Wide Lens											
Product Code	Wattage (W)	Luminous Flux at Tc 25°C (lm)	Luminous Efficacy at Tc 25°C (lm/W)	Luminous Flux at Tc 85°C (lm)	Luminous Efficacy at Tc 85°C (lm/W)	Colour Temp.[CRI]	Life Time at L70 B50 and Tc 75°C (hrs)	Dimension (mm)	Power Factor	Energy Label	Product Photo
AP3725v/830-230V	32	2900	91	2465	78	3000K [Ra80]	50000	Ø160 x H7.3	>0.95	A+	7
AP3725v/840-230V	32	3000	94	2550	80	4000K [Ra80]	50000	Ø160 x H7.3	>0.95	A+	7

LED LIGHT ENGINES

TECOH® THx

The MEGAMAN® TECOH® THx is an LED Light Engine (LLE) that offers an excellent alternative to MR16 and PAR16 halogen

TECOH® THx LLE are ideal for integration in recessed and surface mounted spotlights. The unique electrical connection prevents the retrofit of high energy consuming halogen.

With a built-in driver, optics and heat sink the TECOH® THx is a simple way to upgrade to a highly efficient LED solution.

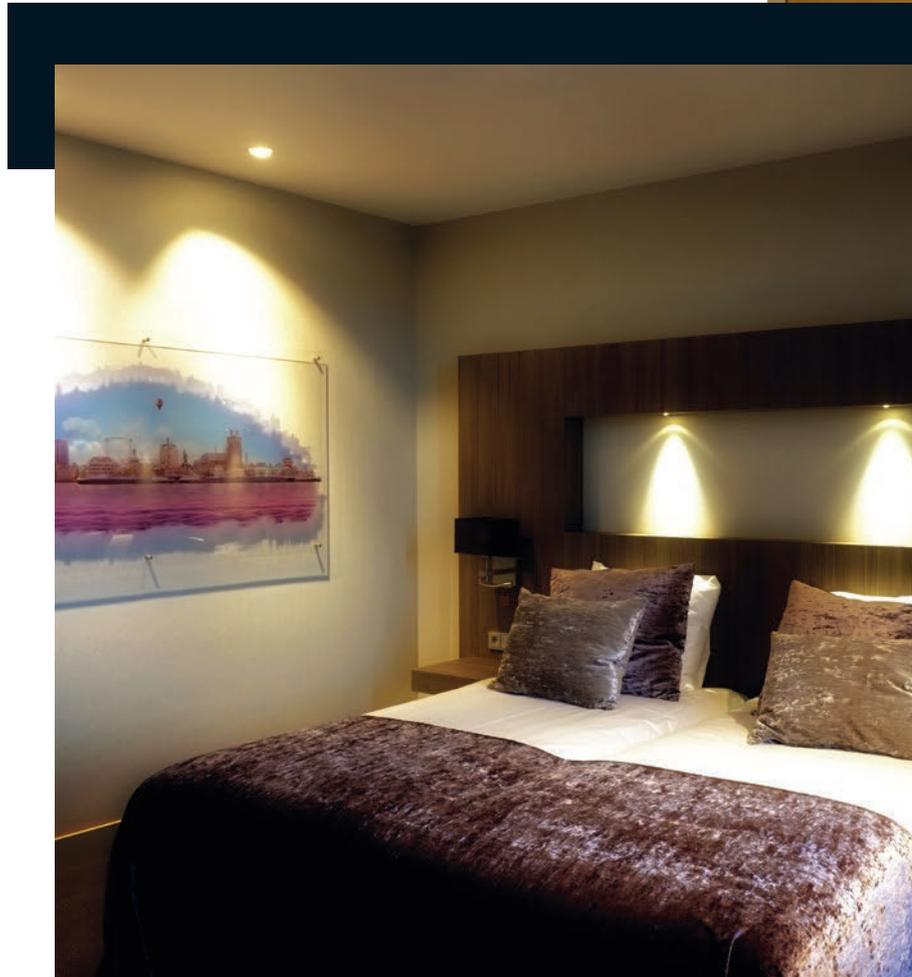
Offering enhanced beam control and efficacy, MEGAMAN®'s hybrid reflector combines the best features MEGAMAN®'s popular faceted reflector range with the total internal reflection of our optical reflector to provide a solution that performs even better than competing LED technologies.

Avoiding the 'showerhead' look of multiple lens solutions, the hybrid reflector is still able to take advantage of the precise beam control of the parabolic reflector approach, while minimising spill light, reducing glare and eliminating the 'visual noise' of multiple lens arrays.

MEGAMAN®'s hybrid reflector technology also combines superior performance, with beautiful aesthetics – barely distinguishable from the much-loved and familiar look of a halogen reflector, but with far higher efficiency.

Product Features

- Dim to warm technology included
- Smart Lighting over Bluetooth and Zigbee options added to complete the range
- First serviceable LED solution for fire rated downlights
- UK Building regulation for low energy lighting Part L compliant
- Unique electrical connection to prevent high energy consuming halogen being retrofitted
- Design with integrated driver, optics and heat-sink for easy upgrade to highly efficient LED solution
- High system efficiency up to 86m/W and A+ energy class
- Long life of 30,000 hours in most critical, fully enclosed, environments
- Energy saving of 80% when compared to halogen
- Dimmable versions available



LED LIGHT ENGINES TECOH® THx



220-240V | Line Voltage

Dimmable

SDCM
≤6

Product Code	Wattage (W)	Luminous Flux (lm)	Luminous Efficacy (lm/W)	Luminous Flux in 90° Cone (lm)	Beam Angle (°)	Max Luminous Intensity (cd)	Colour Temp. [CRI]	Rated Life at L70 B50 and Ta 25°C (hrs)	Diameter (mm)	Height (mm)	Dimmable	Energy Label	Product Photo
TH0106d-36D/828-230V	8	600	75	420	36	650	2800K [Ra80]	30000	53	66	100-10% ¹	A	1
TH0106d-36D/840-230V	8	630	79	440	36	650	4000K [Ra80]	30000	53	66	100-10% ¹	A	1
TH0205-24D/828-230V	7.5	500	67	460	24	3000	2800K [Ra80]	25000	50	65	No	A+	2
TH0205-24D/840-230V	7.5	500	67	460	24	3000	4000K [Ra80]	25000	50	65	No	A+	2
TH0205-36D/828-230V	7.5	500	67	460	36	1100	2800K [Ra80]	25000	50	65	No	A+	2
TH0205-36D/840-230V	7.5	500	67	460	36	1100	4000K [Ra80]	25000	50	65	No	A+	2
TH0205d-24D/828-230V	8	500	63	460	24	3000	2800K [Ra80]	25000	50	65	100-5% ¹	A	2
TH0205d-24D/840-230V	8	500	63	460	24	3000	4000K [Ra80]	25000	50	65	100-5% ¹	A	2
TH0205d-36D/828-230V	8	500	63	460	36	1100	2800K [Ra80]	25000	50	65	100-5% ¹	A	2
TH0205d-36D/840-230V	8	500	63	460	36	1100	4000K [Ra80]	25000	50	65	100-5% ¹	A	2
TH0205w-36D/828-230V	8	500	63	460	36	1100	2800K - 1800K [Ra80]	25000	50	65	100-5% ¹ (2800K-1800K)	A	2
TH0307-24D/828-230V	8.5	700	82	640	24	4000	2800K [Ra80]	25000	50	75	No	A+	3
TH0307-24D/840-230V	8.5	700	82	640	24	4000	4000K [Ra80]	25000	50	75	No	A+	3
TH0307-36D/828-230V	8.5	700	82	640	36	1500	2800K [Ra80]	25000	50	75	No	A+	3
TH0307-36D/840-230V	8.5	700	82	640	36	1500	4000K [Ra80]	25000	50	75	No	A+	3
TH0309-24D/828-230V	10.5	900	86	830	24	5000	2800K [Ra80]	25000	50	75	No	A+	3
TH0309-24D/840-230V	10.5	900	86	830	24	5000	4000K [Ra80]	25000	50	75	No	A+	3
TH0309-36D/828-230V	10.5	900	86	830	36	1900	2800K [Ra80]	25000	50	75	No	A+	3
TH0309-36D/840-230V	10.5	900	86	830	36	1900	4000K [Ra80]	25000	50	75	No	A+	3
TH0308dBT2-24D/828-230V	10	800	80	730	24	4500	2800K [Ra80]	25000	50	75	100-5% ²	A+	3
TH0308dBT2-24D/840-230V	10	800	80	730	24	4500	4000K [Ra80]	25000	50	75	100-5% ²	A+	3
TH0308dBT2-36D/828-230V	10	800	80	730	36	1700	2800K [Ra80]	25000	50	75	100-5% ²	A+	3
TH0308dBT2-36D/840-230V	10	800	80	730	36	1700	4000K [Ra80]	25000	50	75	100-5% ²	A+	3
TH0308dZB-24D/828-230V	10	800	80	730	24	4500	2800K [Ra80]	25000	50	75	100-5% ³	A+	3
TH0308dZB-24D/840-230V	10	800	80	730	24	4500	4000K [Ra80]	25000	50	75	100-5% ³	A+	3
TH0308dZB-36D/828-230V	10	800	80	730	36	1700	2800K [Ra80]	25000	50	75	100-5% ³	A+	3
TH0308dZB-36D/840-230V	10	800	80	730	36	1700	4000K [Ra80]	25000	50	75	100-5% ³	A+	3

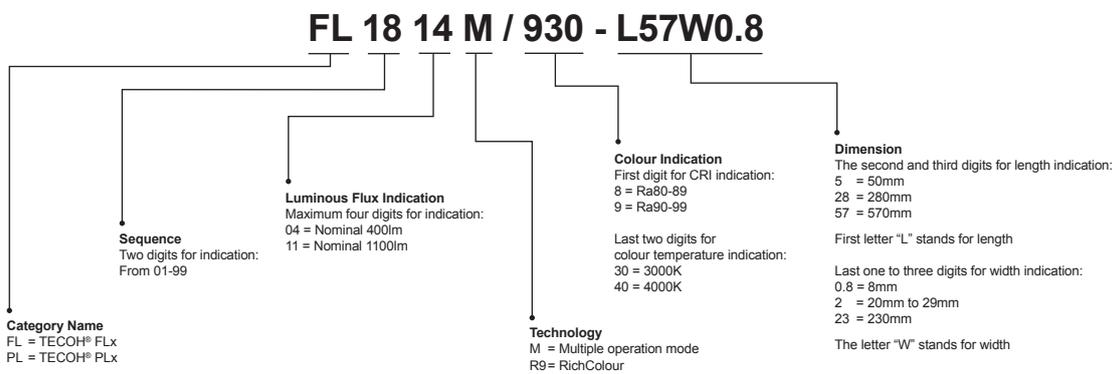
¹ Capable of linear dimming from 100% to 10% or 100% to 5% when working with conventional leading edge dimmers. Please visit www.megaman.cc/user-guide for a list of compatible dimmers.

² Capable of linear dimming from 100% to 5% with integrated dimmer via *INGENIUM*® BLU.

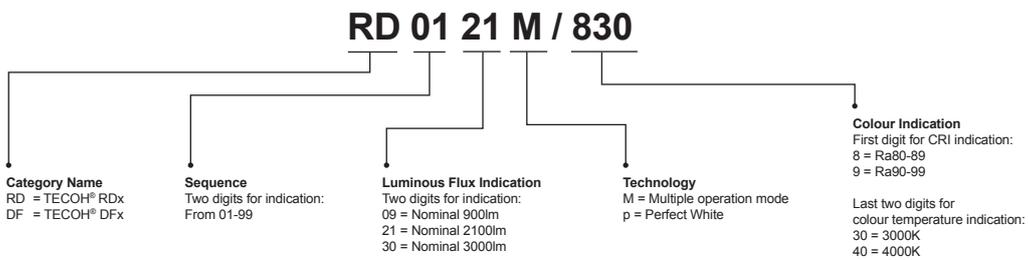
³ Capable of linear dimming from 100% to 5% with integrated dimmer via *INGENIUM*® ZB

Decoding the TECOH® Product Code

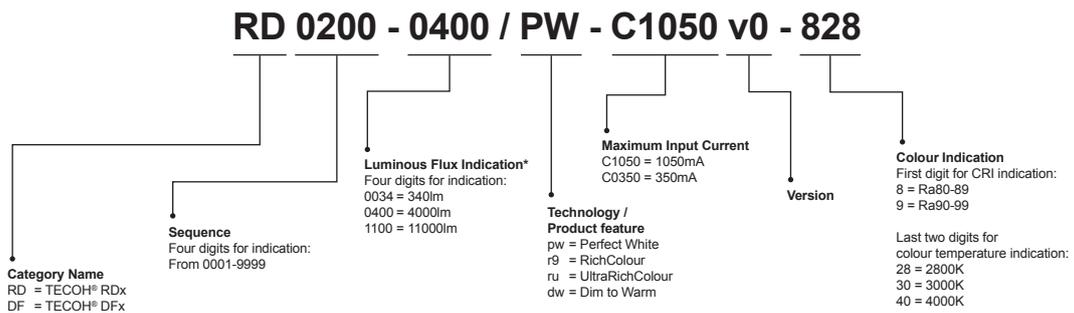
LED Modules – TECOH® FLx and TECOH® PLx



LED Modules – TECOH® RDx Gen2 and TECOH® DFx

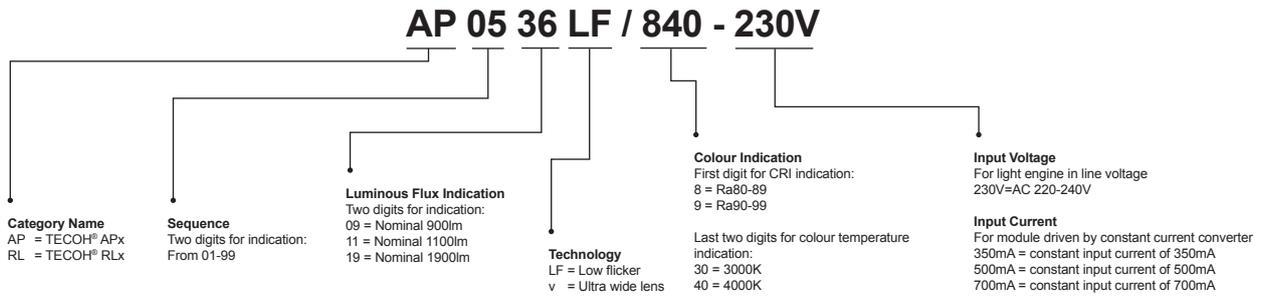


LED Modules – TECOH® RDx Gen3

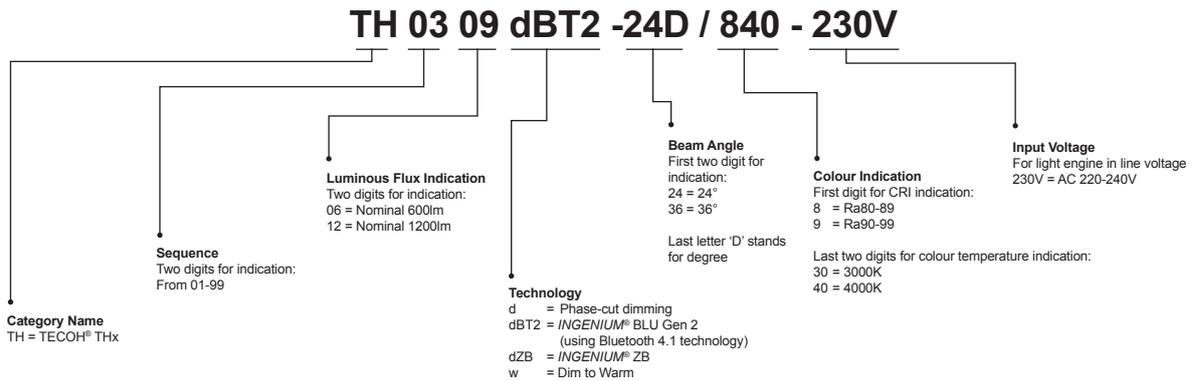


* Highest lumen package at highest allowed input current

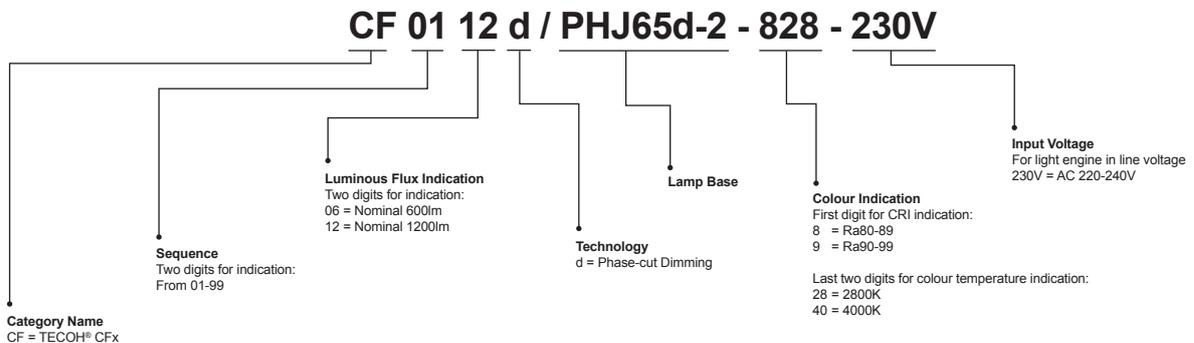
LED Light Engine and Modules –TECOH® APx and TECOH® RLx



LED Light Engine and Module – TECOH® THx



LED Light Engine – TECOH® CFx



MEGAMAN®

www.megamantecoh.com

Version 6.0, 2017

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