

GE ConstantColor™ CMH

The ultimate ceramic metal halide light sources



GE imagination at work

ConstantColor™ CMH Ultra - going beyond standard CMH

ULTRA efficient lighting

GE's ConstantColor™ CMH Ultra 35W and 70W lamps have been specifically created with retail environments in mind. This means significantly improved lumen maintenance and enhanced quality of light - while still retaining GE's market-leading long life of up to 15,000 hours.

CMH Ultra is a clear choice when specifying new stores but they can also be used as a direct replacement for lamps in existing CMH fittings, either with electronic or electromagnetic ballasts.

- 35W and 70W 3000K CMH lamps in G12 and G8.5 formats
- Excellent CRI performance
- Superior lumen maintenance with increased light output
- 930 colour gives a true representation of all colours in the spectrum and right ambience
- Can be used in any existing CMH 35W or 70W G12 or G8.5 systems
- Compatible with both electronic and magnetic ballasts



Improve sales performance

Ultra lamps can be retrofitted directly into existing G8.5 and G12 fixtures to enhance displays and make goods look more attractive. That means better sales performance without the need to change light fittings.

The extra performance of Ultra means that fewer fittings are needed to achieve the same lumen levels and longer service life is also a big bonus.



Lumen maintenance

GE Ultra technology offers the highest lumen maintenance of all the low watt CMH lamp range. This means that products and merchandise are lit better for longer and, at the end of the lamp's rated life, lumen output is 33% more than with the standard range.

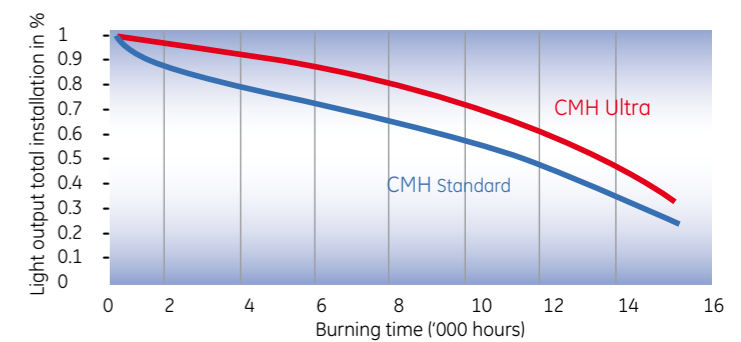
ULTRA low cost of ownership

The excellent lumen maintenance of Ultra means extended replacement cycles and, therefore, savings on maintenance cost. An extension of at least one year can be assumed when calculated relamping cycles.

The benefits of GE CMH Ultra are of particular importance in retail lighting, where the best possible display of goods must be balanced against operating costs.

Service life

All GE CMH products have long service life but when extra performance is required, Ultra is the clear choice, maintaining a consistently higher light output throughout life.



Colour quality

The important role of colour in attracting customers is well known to lighting designers and nowhere is this more important than in the retail sector, where customers must see goods in their true colours. GE CMH Ultra lamps provide the superior colour rendering and consistent colour uniformity to make this happen.

With a colour quality of 930, Ultra lamps cover the full colour spectrum of colours and in particular reds, yellows and browns are brought vividly to life. Furthermore, Ultra lamps exhibit minimal lamp-to-lamp colour variation ensuring consistency throughout the store.

Applications

- Retail and accent lighting
- General retail display
- Wherever standard CMH 35W and 70W, G12 and G8.5 products are in use



See 'CMH Range' page for technical details



The power of CMH

GE's miniature range - Supermini and MR16

Energy saving is not only a cost saving but is also a social responsibility, and the lighting industry is constantly researching products that produce more light using less electricity.

GE is in the vanguard of this research and the company's CMH Supermini range is exceptionally efficient. Coupled with an efficient spotlight fixture, Superminis yield massive energy saving because they generate extremely high luminous flux in a very small space. In the retail environment, in particular, this provides a significant saving with no loss of lighting quality.



- Outstanding efficiency - four times better than halogen
- Outstanding long life - up to 12,000 hours
- Robust and reliable
- Stable colour throughout lamp life
- Enables better optical design
- Simple ballast and lamp holder change

Ultra versions coming soon

Ultra versions of the 35W Supermini and MR16 lamps will be released in May 2010 - the benefits of Ultra combined with the benefits of miniaturisation.

Great savings on cost of ownership

The combination of great energy saving and exceptionally long life when using GE CMH lamps means that big savings can be made on ownership cost. The figures show savings that can be achieved in a typical retail situation - with no loss of light level.



Savings per year

1500 x 20W CMH vs 2700 x 50W Halogen
(Same light level)

Cost saving	€47,180
Energy saving (lighting)	118 kW
Payback time	1-1½ years
CO ₂ reduction	250 tonne

(Assumes 0.536 kg CO₂ emission per kWh)

CMH is the ideal replacement for halogen lighting. A 50W tungsten halogen lamp converts just 7% of energy used into light; the rest emerges as heat. A 20W CMH lamp yields the same light output and converts 25% of the energy used into light.

See 'CMH Range' page for technical details

Performance right across the range

The widest choice

GE's ConstantColor™ Ceramic Metal Halide range is second to none in the range that is on offer and with wattages ranging from 20W to 400W, it covers a wide scope of lighting applications, both indoors and outdoors. These include accent lighting, spot lighting, flood lighting and area lighting.

The range includes lamps for all the common formats - G8.5, G12, E27/E40 and Rx7s, as well as MR16 and PAR reflectors.

Lighting designers can choose from 3000K and 4200K colours and their needs are also catered for by the flexibility of ballasts that can be used. GE works closely with OEMs and offers a list of approved ballasts.



Best-in-class life performance

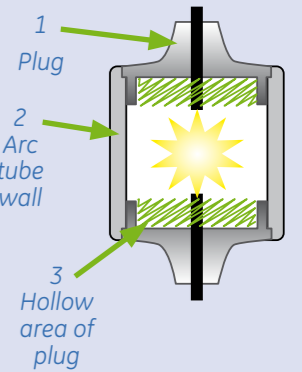
ConstantColor™ CMH lamps offer excellent lamp life of up to 24,000 hours in both indoor and outdoor applications. This is due largely to the unique three-part construction of the arc tube.

As well as the obvious benefit of cost saving, this also means an important reduction in the environmental impact of manufacturing, maintaining and disposing of product.

Because they are dependable and have long life, all GE CMH lamps fit well into planned lighting maintenance schemes where fittings are re-lamped on a schedule that is based on the known performance of lamps.

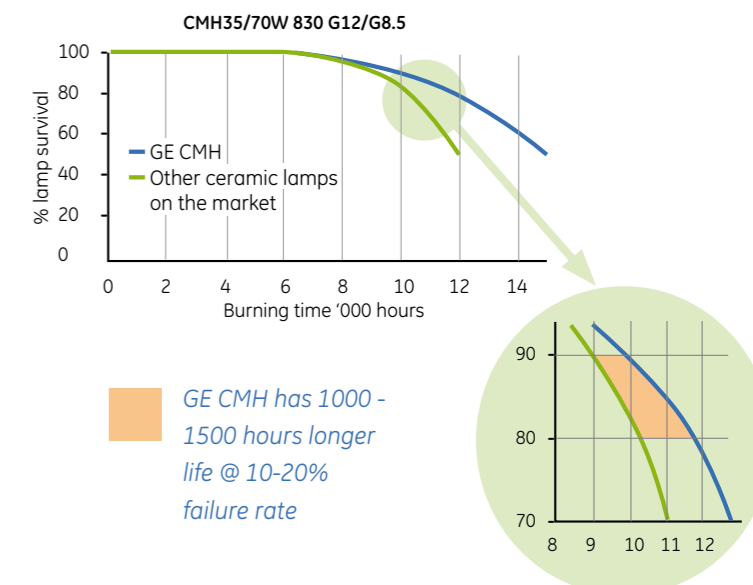
Three-part construction

GE's industry-leading three part arc tube is renowned for its consistent reliability and long life when compared with other designs.



CMH time-savers

Compared to other ceramic lamps, for example, the extra survival rate of GE CMH is much better, as seen in the graph. This saves time, labour and cost.



Brand cross reference


GE	OSRAM	PHILIPS
CMH20/TC/UVC/830/GU6.5	HCI-TF 20W/830 WDL PB GU6.5	CDM-Tm Mini PGJ5 20W/830*
CMH35/T/UVC/930/GU6.5	-	CDM-Tm Mini PGJ5 35W/830*
CMH35/T/UVC/942/GU6.5	-	-
CMH20/TC/UVC/U/830/G8.5 Plus	HCI-TC 20W/830 WDL PB G8.5	CDM-TC 20W/830 G8.5 1CT*
CMH35/TC/UVC/U/830/G8.5 Plus	HCI-TC 35W/830 WDL PB G8.5	CDM-TC 35W/830 G8.5
CMH35/TC/UVC/U/942/G8.5	HCI-TC 35W/942 ND L PB UVS G8.5	CDM-TC 35W/942 G8.5
CMH35/TC/UVC/U/930/G8.5 ULTRA	-	CDM-T Elite 35W/930 G8.5 1CT*
CMH70/TC/UVC/U/830/G8.5 Plus	HCI-TC 70W/830 WDL PB G8.5	CDM-TC 70W/830 G8.5
CMH70/TC/UVC/U/942/G8.5	HCI-TC 70W/942 ND L PB G8.5	CDM-TC 70W/942 G8.5
CMH70/TC/UVC/U/930/G8.5 ULTRA	HCI-TC 70/930 WDL PB Shop G8.5*	CDM-TC Elite 70W/930 G8.5*
CMH20/T/UVC/U/830/G12 Plus	-	CDM-T 20W/830 G12 1CT*
CMH35/T/UVC/U/830/G12 Plus	HCI-T 35W/830 WDL PB G12	CDM-T 35W/830 G12
CMH35/T/UVC/U/942/G12	HCI-T 35W/942 ND L PB UVS G12	CDM-T 35W/942 G12
CMH35/T/UVC/U/930/G12 ULTRA	-	CDM-T Elite 35W/930 G12 1CT*
CMH70/T/UVC/U/830/G12	HCI-T 70W/830 WDL PB G12	CDM-T 70W/830 G12
CMH70/T/UVC/U/942/G12	HCI-T 70W/942 ND L PB UVS G12	CDM-T 70W/942 G12
CMH70/T/UVC/U/930/G12 ULTRA	HCI-TC 70/930 WDL PB Shop G12*	CDM-T Elite 70W/930 G12*
CMH150/T/UVC/U/830/G12	HCI-T 150W/830 WDL PB G12	CDM-T 150W/830 G12
CMH150/T/UVC/U/942/G12	HCI-T 150/ND L PB UVS G12	CDM-T 150W/942 G12
CMH35/TD/UVC/830/RX7s	-	-
CMH70/TD/UVC/830/Rx7s	HCI-TS 70W/830 WDL PB UVS RX7S	CDM-TD 70W/830 RX7s
CMH70/TD/UVC/942/Rx7s	HCI-TS 70W/942 ND L PB UVS RX7S	CDM-TD 70W/942 RX7s
CMH150/TD/UVC/830/Rx7s-24	HCI-TS 150W/830 WDL PB RX7S-24	CDM-TD 150W/830 RX7s-24
CMH150/TD/UVC/942/Rx7s-24	HCI-TS 150W/942 ND L PB RX7S-24	CDM-TD 150W/942 RX7s-24
CMH20/MR16/UVC/830/GX10/SP12	HCI-R16 20/830 WDL PB 12D	MASTERCcolour CDM-R Mini 20W/830 GX10 MR16 10D 1CT *
CMH20/MR16/UVC/830/GX10/FL 25	HCI-R16 20/830 WDL PB 24D	MASTERCcolour CDM-R Mini 20W/830 GX10 MR16 25D 1CT *
CMH20/MR16/UVC/830/GX10/WFL40	HCI-R16 20/830 WDL PB 40D	MASTERCcolour CDM-R Mini 20W/830 GX10 MR16 40D 1CT*
CMH35/MR16/UVC/930/GX10/SP12	-	-
CMH35/MR16/UVC/930/GX10/FL25	-	-
CMH35/MR16/UVC/930/GX10/WFL40	-	-
CMH35/MR16/UVC/942/GX10/SP12	-	-
CMH35/MR16/UVC/942/GX10/FL25	-	-
CMH35/MR16/UVC/942/GX10/WFL40	-	-
CMH20PAR20/UVC/830/E27/SP10	-	-
CMH20PAR20/UVC/830/E27/FL25	-	-
CMH35/PAR20/UVC/830/E27/SP10	HCI-PAR20 35W/830 WDL SP E27	CDM-R 35W/830 E27 PAR20L10D
CMH35/PAR20/UVC/830/E27/FL25	HCI-PAR20 35W/830 WDL FL E27	CDM-R 35W/830 E27 PAR20L30D
CMH35/PAR20/UVC/930/E27/SP10	-	-
CMH35/PAR20/UVC/930/E27/FL 25	-	-
CMH35/PAR20/UVC/942/E27/SP10	HCI-PAR20 35W/942 ND L PB SP 10D	CDM-R 35W/942 E27 PAR20L10D
CMH35/PAR20/UVC/942/E27/FL25	HCI-PAR20 35W/942 ND L PB FL 30D	CDM-R 35W/942 E27 PAR20L30D
CMH20PAR30/UVC/830/E27/SP10	HCI-PAR30 20W/830 WDL SP E27	-
CMH20PAR30/UVC/830/E27/FL25	HCI-PAR30 20W/830 WDL FL E27	-
CMH20PAR30/UVC/830/E27/FL25	HCI-PAR30 20W/830 WDL FL E27	-
CMH35/PAR30/UVC/830/E27/SP10	HCI-PAR30 35W/830 WDL SP E27	CDM-R 35W/830 E27 PAR20L10D
CMH35/PAR30/UVC/830/E27/FL25	HCI-PAR30 35W/830 WDL FL E27	CDM-R 35W/830 E27 PAR20L30D
CMH35/PAR30/UVC/930/E27/SP10	-	-
CMH35/PAR30/UVC/930/E27/FL25	-	-
CMH35/PAR30/UVC/942/E27/SP10	HCI-PAR30 35W/942 ND L PB SP 10D	-
CMH35/PAR30/UVC/942/E27/FL25	HCI-PAR30 35W/942 ND L PB FL 30D	-
CMH70/PAR30/UVC/830/E27/SP15	HCI-PAR30 70W/830 WDL SP E27	CDM-R 70W/830 E27 PAR30L10D
CMH70/PAR30/UVC/830/E27/FL40	HCI-PAR30 70W/830 WDL FL E27	CDM-R 70W/830 E27 PAR30L40D
CMH70/PAR30/UVC/942/E27/FL15	HCI-PAR30 70W/942 ND L PB SP 10D	CDM-R 70W/942 E27 PAR30L10D
CMH70/PAR30/UVC/942/E27/SP40	HCI-PAR30 70W/942 ND L PB FL 30D	CDM-R 70W/942 E27 PAR30L40D
CMH70/E/UVC/U/830/E27/C	HCI-E/P 70/830 WDL PB E27 clear	CDM-ET 70W /830 E27
CMH100/E/UVC/U/830/E27/C	HCI-E/P 100/830 WDL PB clear	CDM-ET 100W /830 E40
CMH150/UVC/O/U/942/E27/C	HCI-E/P 150W/942 ND L PBMO CL E27	-
CMH70/E/UVC/U/830/E27/D	HCI-E/P 70W/830 ND L PB COE27	CDO-ET Coated 70W/828 E27*
CMH70/UVC/O/U/940/E27/D	HCI-E/P 70W/942 ND L Coated E27	-
CMH100/E/UVC/U/830/E27/D	HCI-E/P 100W/830 WDL PB Coated E27	CDO-ET Coated 100W/828 E40*
CMH150/UVC/O/U/940/E27/D	HCI-E/P 150W/942 ND L PB MO E27	CDO-ET Coated 150W/828 E40*
CMH250/E/UVC/U/830/E40/D	HCI-E 250W/830 WDL PB E40	-
CMH400/E/UVC/U/830/E40/D	-	-
CMH70/TT/UVC/830/E27	HCI-T/P 70W/830 WDL PB E27	CDO-TT 70W /828 E27*
CMH100/TT/UVC/830/E40	-	CDO-TT 100W /828 E27*
CMH150/TT/UVC/830/E40	HCI-T/P 150W/830 WDL PB E40	CDO-TT 150W/828 E40*
CMH150/UVC/T/U/842/E40	-	CDO-TT 150W/828 E40*
CMH150/UVC/O/T/U/830/E40	HCI-T/P 150W/830 ND L PB E40	-
CMH150/T/UVC/O/U/942/E40	HCI-T/P 150W/942 ND L PB E40	-
CMH250/TT/UVC/U/830/E40	HCI-T 250W/830 WDL PB E40	CDO-TT 250W /828 E27 *
KRC250/CMH/830/T/H/E40	-	-
CMH400/TT/UVC/U/830/E40	-	-

*Similar type

Information is gathered from relevant official web sites as of October, 2009

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