

A range of lamps powered by Drive Hub & IPM. Designed to allow a large number of lamps to be driven on a single circuit, replacing tungsten in a wide range of applications. Low voltage with highly efficient optics that re-create the classic sparkle of traditional lamps.

IPM is a revolutionary driver technology that can provide both power and six channels of control data over legacy or new 2-core cabling with perfectly uniform dimming.

Multiple selectable personalities allow the lamp to operate in a mode that suits any environment, with configurable colour temperature and fade-to-warm options alongside flicker effects for candle-like operation.

The candle version fits the standard form-factor for C35 lamps and is offered with a clear envelope as standard.



Key Features

- Powered by IPM
- Multi-channel control
- Adjustable colour temperature
- Multifaceted wide beam lens
- 7 Configurable personalities

Technical Parameters

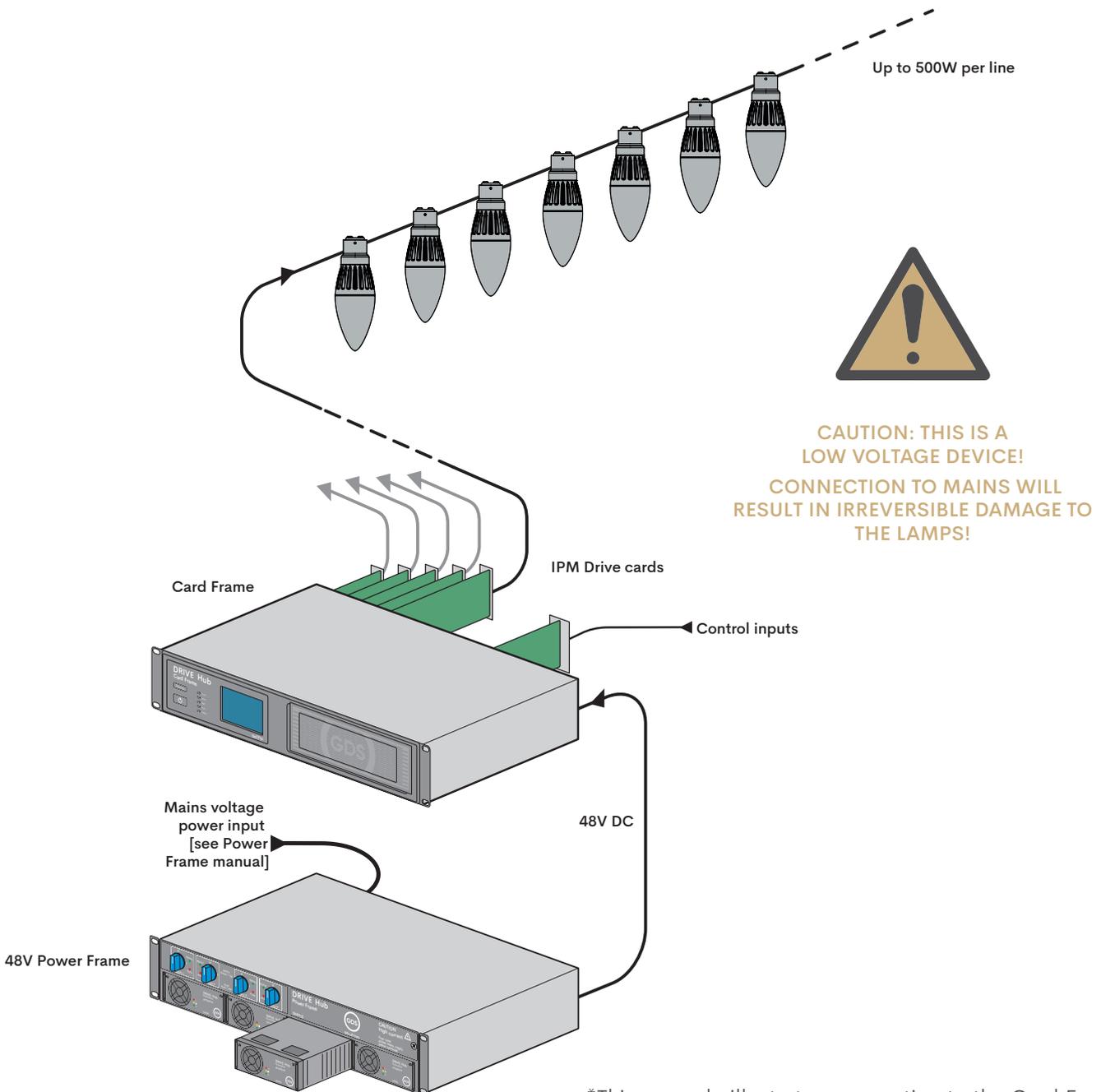
Control Method	IPM
Control Channels	6
Personalities	7
Colour Temperature	Configurable 1800-3000K
CRI	>92
Operating Voltage	36-72V (IPM Only)
Light Output	490 Lumens
Base Options	E14, E27, B15d, B22
Nominal Power	4.2W
Ingress Protection	IP20

Connection Data

The GDS Lamp should only be connected to the DriveHub Card Frame, Mini Pack or Micro Pack system, via IPM Drive Cards. Under **no circumstances** should they be connected to an ordinary mains voltage system.

These are low-voltage devices and connection to mains voltage will result in **irreversible damage** to the fixtures.

The GDS IPM circuit should be connected as follows:

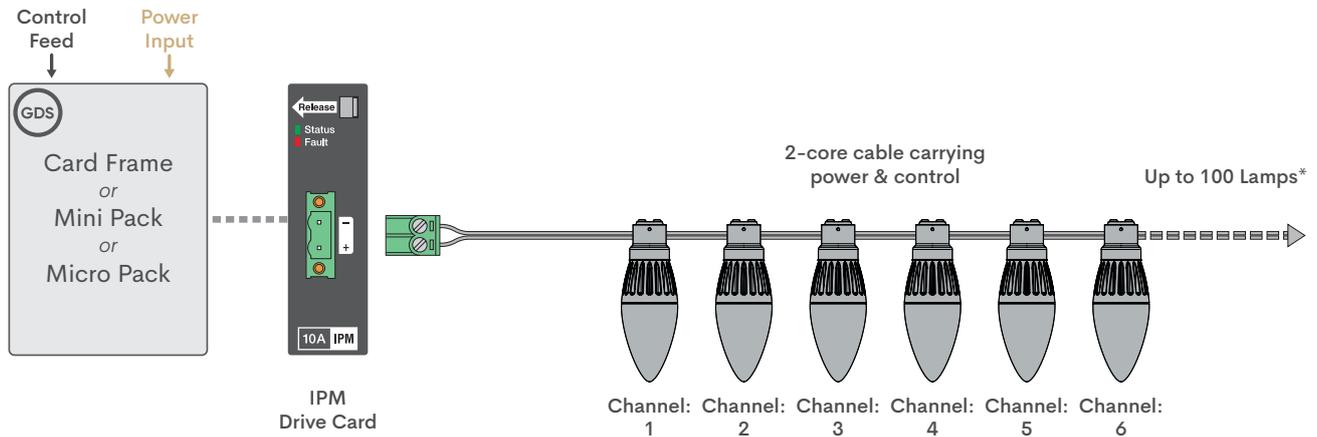


*This example illustrates connection to the Card Frame and Power Frame via IPM Drive Cards. The GDS Lamp is also compatible with the Mini Pack and Micro Pack systems when used with IPM Drive Cards.

Power Connection

The GDS Lamp uses the proprietary protocol, known as IPM. This system enables DC power and control data to be distributed over a two-core cable to multiple lamps on a single circuit, as shown in the connection diagram below. Each circuit supports a theoretical maximum load of up to 500 W; actual limits will vary depending on factors such as cable length, cable type, and installation conditions.

The system provides six independent control channels (groups), defined by the IPM drive card, allowing fixtures to be addressed and controlled in groups, via the Drive Hub system.



Personalities

The lamp can be configured with seven operating personalities, selectable via the web or touchscreen interface:

2700K Fade-to-Warm

Gradually warms the colour temperature as the lamp is dimmed, mimicking the behaviour of tungsten fixtures. The primary colour temperature is fixed at 2700K, fading down to 1800K.

3000K Fade-to-Warm

Provides the same tungsten-like warm-shift during dimming, with a primary colour temperature of 3000K. The output fades from 3000K down to 1800K.

Custom Fade-to-Warm

Offers the same warm-shifting dimming behaviour, but allows the user to set the primary colour temperature anywhere between 1800K and 3000K.

Fixed CCT

The lamp operates at a single, user-selectable colour temperature between 1800K and 3000K, with intensity control on a single channel.

2-Channel Tuneable

The lamp is controlled via two channels: one dedicated to intensity and the other to colour temperature, allowing independent adjustment of these parameters.

Candle 1-Channel

The lamp produces a randomised flicker effect designed to imitate the natural behaviour of a candle flame.

Candle 2-Channel

This mode provides two control channels: one for intensity and one for volatility, allowing the amount of flicker variation to be adjusted.

IPM Features

In addition to personalities, the GDS Lamps inherit the standard IPM protocol features:

Groups

During installation, each lamp can be assigned to a control group. Groups are independently controllable, with the protocol supporting up to six control channels per circuit. Each group can be allocated a unique DMX address for control.

When using any of the 2-channel personalities, the number of available channels is reduced, as a maximum of six control channels per circuit is supported.

IPM Speed

Each IPM Drive Card (and all connected lamps) can be configured to use one of three IPM speeds:

1. Legacy
2. Fast
3. Max

Max speed is set by default and is recommended for all new installations, as it ensures correct group functionality. Legacy and Fast speeds should be used only in installations where existing IPM equipment is already operating at these speeds.

Custom Curves

Using the designated GDS Curve Tool, a custom dimming curve can be created to meet specific application requirements. When the custom curve option is selected in the dimming parameters, the curve can be uploaded to all connected lamps.

Emergency Polling

If the system includes a dedicated 48V emergency power supply and changeover relay, the lamps can be configured to operate in Emergency Mode. In this mode, if power to the Drive Hub is lost, the lamps automatically default to a user-defined intensity level (0–255).

This is achieved by configuring both the IPM drive card and IPM fitting for emergency operation. During normal conditions, they exchange frequent "System Good" messages to confirm correct operation and enable rapid emergency response if the messages stop.

If power to the Drive Hub is lost, the changeover relay switches to the maintained 48V supply. As this supply cannot send "System Good" messages, the fitting receives power but no confirmation signal, assumes an emergency state, and illuminates to the configured emergency light level.

Eco Mode

When Eco Mode is enabled, the Drive Card will shut off power to the connected lamps if the DMX dimming value remains at 0% for more than 10 seconds, helping reduce standby power consumption.

Once the dimming level rises above 0%, the Drive Card automatically restores power and the lamps turn back on.

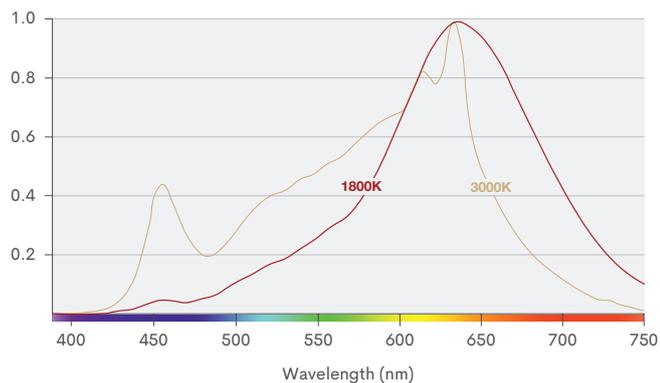
Note: When exiting Eco Mode, there is a brief delay of approximately ~50ms before the lamp responds. Eco Mode can be disabled when faster reaction speeds are required.

Dimming Parameters

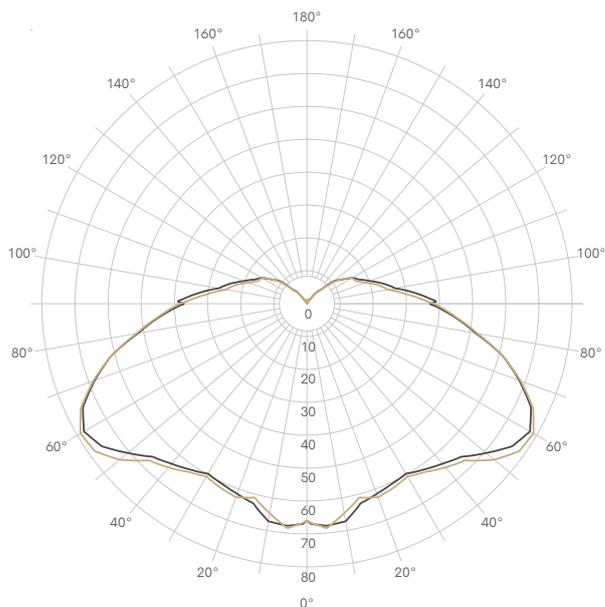
Each IPM Drive Card includes a set of configurable dimming parameters that apply to all fixtures on the connected circuit.

Dimming curve:	Incandescent, Linear, Square Law, Custom
PWM frequency:	255Hz, 300Hz, 510Hz, 600Hz, 1020Hz, 1200Hz, 2040Hz, 4080Hz, 19.2kHz
Response Time (mS):	0, 50, 100, 200, 250, 300, 400, 500, 600, 700, 800, 900, 1000
Minimum output level:	0 to 255
Maximum output level:	0 to 255

Spectral Distribution

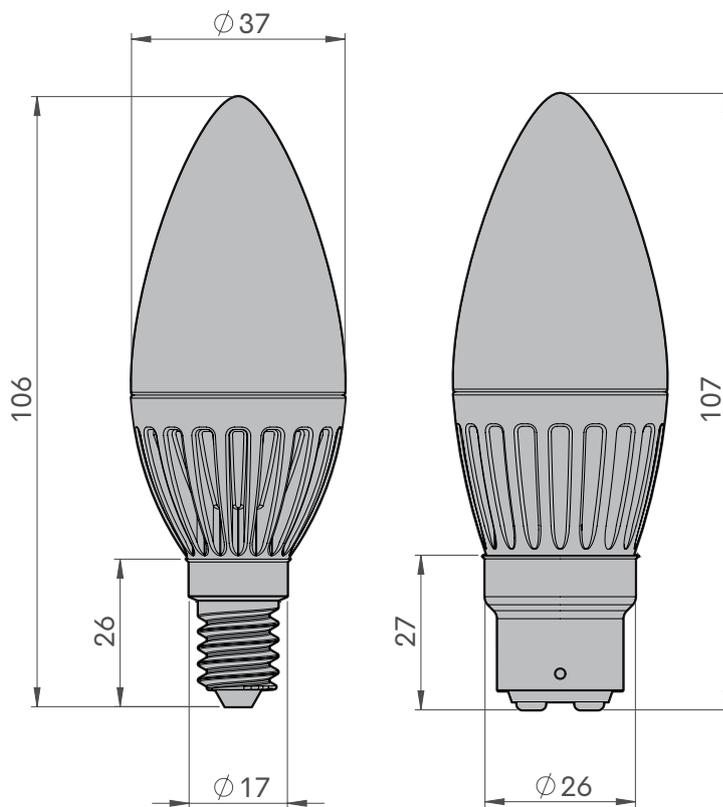


Light Distribution



Lamp=489.9 lm (100%)
 Max=78.9 cd
 Power=4 W
 Color=3005 K

Dimensions



E14/B15d

E27/B22

Specifications are subject to change without notice.