

SYSTEM SETUP





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The Bits2Power control system has been developed to create a seamless integration between lighting, building management and entertainment systems. With Bits2Power lighting can be dimmed stepless and smoothly, even down to the last 10%. Upto 4 colours (RGBW) can be fully controlled and each light point is addressed individually.

As input signals DMX/RDM, DALI and Ethernet can be applied. With the output signal LEDs, Halogen, 0-10V and compact fluorescent can be controlled.

Each light point only needs two wires for both power and 2-way communication, reducing installation cost significantly. Bits2Power applies an open protocol any system integrator, installer or luminaire manufacturer can use.

MAIN BENEFITS

- Easy installation, low wiring & installation cost
- Widely applicable
- Superior light effect
- Energy saving solution
- Bridging long distances
- · Safe installation and use

KEY FEATURES

- Installation based on '2 wires only' principle
- Input signal DALI, DMX/RDM or Ethernet
- LED smoothly dimmable down to 0%
- Drivers individually addressable
- 95% Energy Efficiency & Low Stand-by Power
- Safe 48V output signal





POWER DATA CONTROLLER

The heart of each Bits2Power system is the Power Data Controller (PDC). It is a combined power and communication unit. Each PDC will be equipped with a protocol key of choice and can handle upto 96 single addresses and 64 drivers. For large installations several Power Data Controllers are connected by applying the daisy chain principle on the protocol keys.

SPECIFICATIONS POWER DATA CONTROLLERS		
Charachteristics	Values	
DC output voltage		
Rated current	12.5A	
Rated power		
AC inut voltage range	85-264V	
Power Efficiency	Up to 90%	
Standby power	1.7W	
Maximum operating	-5°C/+40°C	
temperature		
IP rating	IP20	
Weight	3.1 kg	
Dimension (lxwxh) in mm	350x137x93mm	



PROTOCOL KEY

Each system can be tailored with the prefered protocol through specific protocol keys.

Available are DMX/RDM, DALI, Ethernet and a Service key.

SPECIFICATIONS DALI PROTOCOL KEY	
Charachteristics	Values
DC output voltage	max. 44V
DC output current	2mA
Max. operating temperature	-5 °C / +40 °C
IP rating	IP20
Weight	0,1 kg
Dimension (l x w x h) in mm	115 x 76 x 38 mm



KEYPAD

The Bits2power system can be extended with a keypad. While having a multitude of protection features and IP20 rating, it can safely fit in standard wall sockets. Fronts labels are available with own designs.

SPECIFICATIONS RETPAD		
Charachteristics	Values	
DC input voltage range	2448V	
Input power	1W	
Max. operating temperature	-20°C / +50°C	
IP rating	IP20	
Weight	0.087 kg	
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DRIVERS

Bits2Power drivers are available for compact fluorescent, Halogen, 0-10V and LED sources. The LED-drivers are available from 1-channel (single colour) upto 4-channels (multi-colour). Each driver has a 16 position group address switch. Current drivers are available with an output current of 350, 500, 700, 1050, 1200, 1400mA. PWM drivers are available with an output voltage of 12, 24, 36 VDC.

SPECIFICATIONS LED DRIVERS 1-CHANNEL		
Charachteristics	Values	
DC output voltage range		
Rated currents	350/500/700/1050mA	
Maximum power	16W/22W/31W/46W	
Number of LEDs	112	
DC input voltage range	24-48V (= Uin)	
Minimal power efficiency	92%	
Standby power	< 1mW	
Max operating temperature	-20 °C / +50 °C	
IP rating		
Weight	0,17 kg	
Dimension (l x w x h) in mm	156 x 38 x 25 mm	