

Digital controller for pulsed LEDs

ampyr® LED-M 4C-30/40

4 channels allow easy control of
of high-power LEDs and LED groups



Front view ampyr LED-M 4C-30/40 (4-channel)

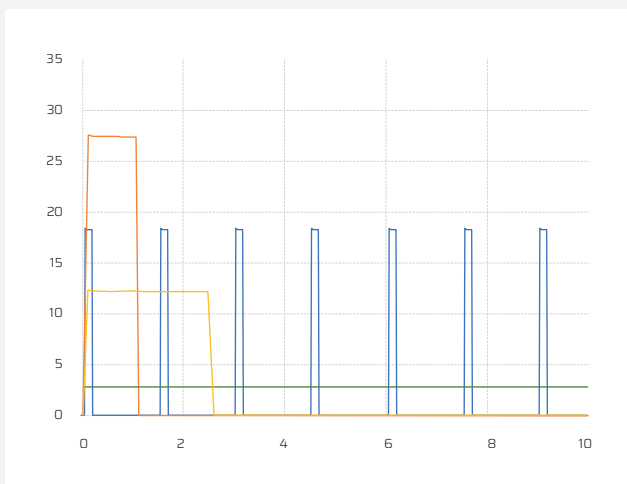
The 4-channel digital controller is suitable for controlling LEDs and LED groups. It allows precise adjustment of LED current, pulse length and pulse delay in a wide range independently for each channel. Also independently for each channel the operation modes OFF, DC and PULSE can be selected.

PRODUCT HIGHLIGHTS

- Pulseable up to 100 kHz at highest pulse stability
- Low overshoot
- Rectangular pulses
- Excellent flash reproducibility
- 4 independent channels with parameter monitoring
- LED current up to 30 A, resolution in mA range

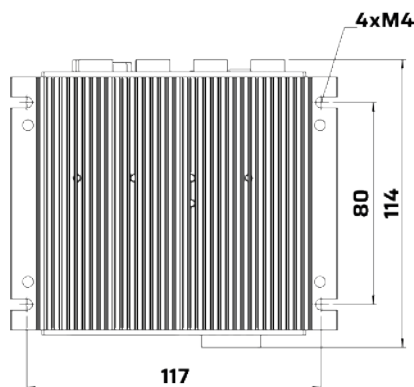
AREAS OF APPLICATION

- Camera-based inspection
- Industrial image processing
- High-speed LED lighting
- Stroboscopic illumination
- Hyperspectral imaging

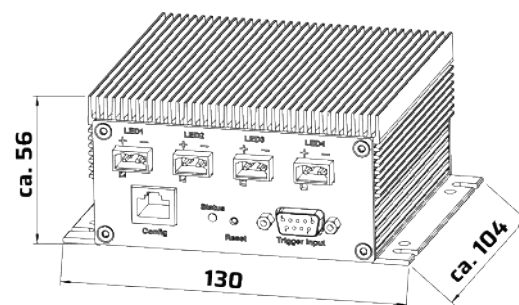


Example of the freely configurable signal shapes per channel

Input parameters	
Supply voltage	9 to 48 V _{DC}
Trigger input:	Low: 0 to 0,8 V / high: 2,4 to 5 V
Maximum pulse frequency	100 kHz
Output parameters	
Output channels	4 independent constant current outputs with parameter monitoring
Rise time t_{10-90}	3 μ s
Fall time t_{90-10}	1 μ s
Efficiency (P_{out} / P_{in})	to 97 %
Output voltage	0 to V _{in} -1 V
Total power dissipation	10 W
Software adjustable parameters	
Output current	0 to 30 A in 8 mA steps, up to 3 A CW, up to 30 A pulsed 0 to 3 A in 1 mA steps, up to 1.5 A DC, up to 3 A pulsed
Pulse length adjustment	5 μ s...60 s, jitter < 0,1 μ s
Pulse delay	5 μ s...60 s, jitter < 0,1 μ s
Security	
Monitoring	LED current, housing temperature, internal temperatures, parameter monitoring (pulse length/current)
Execution	
Weight	0.5 kg
Dimensions	See illustration
Interfaces	Ethernet or USB
Ambient temperature	0 to 40 °C
Mounting	Mounting holes, clip for DIN rails
Accessories	
Scope of delivery	Device, 1x female connector 4-pin, 4x female connector 2-pin, 2x clip for DIN rails, operating instructions, software



Top view ampyr LED-M 4C-30/40 (4-channel)
dimensions in mm



Front view ampyr LED-M 4C-30/40 (4-channel)
dimensions in mm