iPulse IP-1P1S-50A

iCore Smart LED Strobe Controller

Key Features

- Overdriving function
- Max. Switching freq. 300kHz
- Support LED protection
- Current pulse control < 50A
- Auto LED voltage < 80V
- Trigger sequence generator
- Fast current response < 0.5 μs
- Min. pulse duration: 0.5 μs

Application

- Fast moving object capturing for area scan camera (Flying review)
- Controlling exposure for TDI line scan camera
- Where High power LED is required

High-power, High-speed LED controller with Safe & User-friendly Technology

Overdriving for high-power & high-speed LED current control

- Generates repeatable fast & high-power pulse for instant and accurate strobing LED
- Driven by high-speed pulse current less than 0.5μs with overdriving function
- Able to acquire the signals up to 300kHz

Provides uniform brightness of lighting output without ripple

- Current-control ensures no change in cable resistance and length
- Protection from switching noise and external noise of power for uniform lighting

Auto-adjustment LED driving voltage function

- Auto-adjustment of voltage for easy & efficient use and LED protection
- Adjusts LED brightness controlling not voltage but current

TDI Exposure control function

- Controlling exposure time for TDI line scan cameras by LED
- Maintaining uniform quantity of light regardless of speed change

Improvement LED's durability

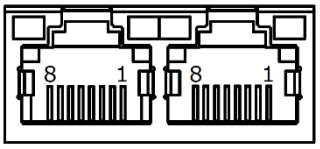
- LED is always protected by automatically limiting the pulse width and duty cycle

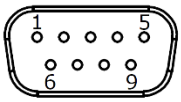
1. Specifications

Model	IP-1P1S-50A
Interface	RS-485 & RS-232
Drive type	Constant current
No. of Channel	1
Min. Pulse width	0.5μs
Max. Switching frequency	300kHz
LED Voltage	1~80V
Max. Power (Continuous / Pulse)	50W / 4,000W
Current (Continuous / Pulse)	5A / 50A
Overdriving	O
Sequence control	O
Power protection	O
No. of strobe controllers configurable	Max. 250 (Modbus Protocol)

2. Interface Pin-map.

RS-485 RS-485





RS-232

RS-485 PORT PIN CONFIGURATION		
3	RS485 Data(A)+	Non-inverting receiver input & driver output
6	RS485 Data(B)-	Inverting receiver input & driver output
4	Trigger Input -	Trigger input RJ45 Port -
5	Trigger Input +	Trigger input RJ45 Port +
7,8	GND	Ground
RS-232 PORT PIN CONFIGURATION		
2	RXD	Receive Data
3	TXD	Transmit Data
5	GND	Ground

3. Mechanical Dimensions