AMARK Series

Industrial Compact Cost-effective Picosecond Laser

- < Compact size, easy for integration
- < Pulse-on-Demond (PoD) function available
- < Burst mode available, burst number: 1 ~ 10
- < Real-time operation status monitoring and intelligent diagnosis

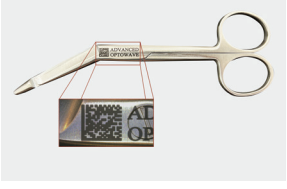
Features & Benefits:

The AMARK series is a specialized laser developed specifically for picosecond marking applications. It features excellent beam quality (M^2 < 1.3), beam roundness exceeding 90%, and reliable pulse and power stability. The available laser wavelengths include 1064 nm, 532 nm, and 355 nm, with an operating frequency range of 100 to 1000 kHz.

Compared to the AOPico Montauk series, the AMARK series has a more compact overall design and a simplified interface. The electrical interface retains only a 24V power supply port and a DB15 connector. The DB15 connector integrates RS-232 serial communication function, allowing users to connect the control signal and serial interfaces to their systems based on their specific requirements. This greatly enhances convenience for system integration.

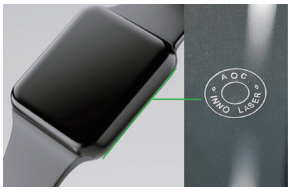
The laser can be controlled via external trigger signals and supports multiple trigger modes, including high/low level and rising/falling edge triggering. The rising/falling edge modes enable pulse-on-demand (POD) function. In addition, external analog voltage control of laser power output is available. Features such as automatic THG crystal indexing , power display, status monitoring, and intelligent diagnosis are included. Through the use of internal sensors, the system provides comprehensive monitoring of the laser's status, offering diagnosis and troubleshooting support, which significantly enhances user experience and ease of use.

These advantages make the AMARK series an ideal choice for applications such as consumer electronics product marking, packaging marking-on-the-fly, and FPC/PCB marking.



Medical Device Marking

Food Packaging Marking-on-the-Fly



Consumer Electronics Product Marking

Color Marking on Stainless Steel

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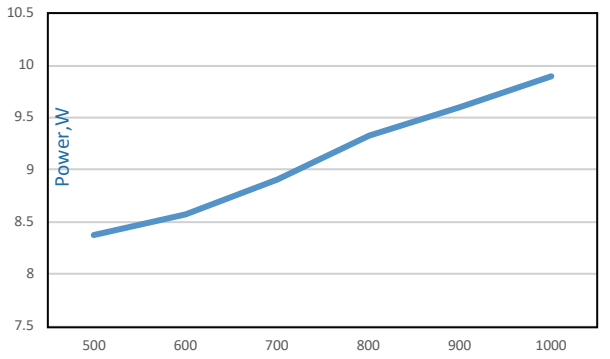
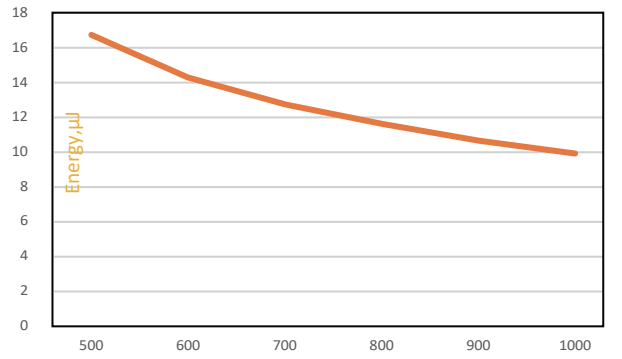
Typical Performance AMARK-355-8W

Power as a Function of Repetition Rate



Typical Performance AMARK-355-8W

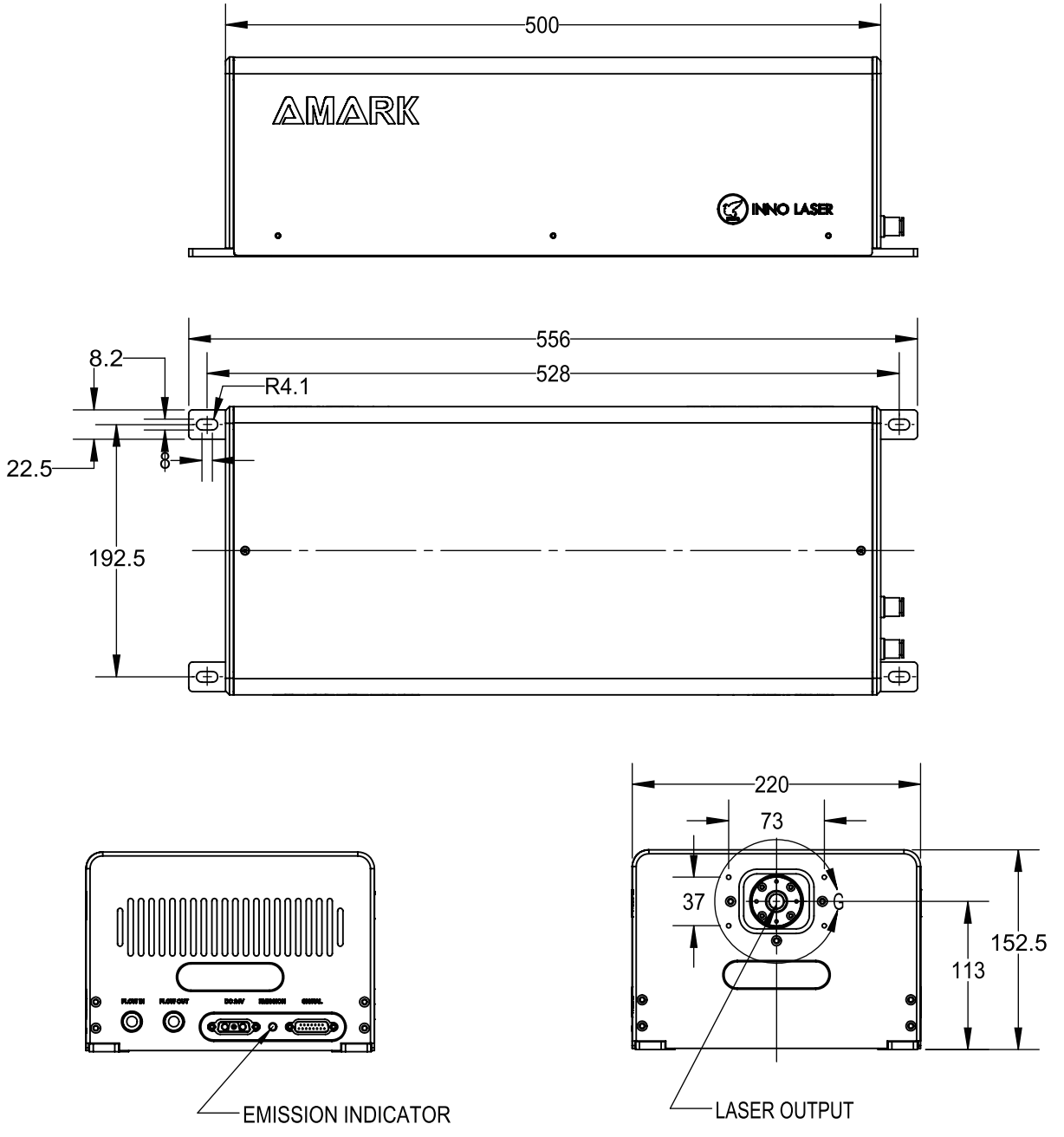
Energy as a Function of Repetition Rate



AMARK 355	
Specifications	**8W-500K**
Wavelength(nm)	355
Avg.Power (Watts)	>8W@500KHz
Pulse Energy (μJ)	>16
Specified Repetition Rate (kHz)	500
Repetition Rate (kHz)	100 ~ 1000
Pulse Width (ps)	<20
Beam Quality (M^2)	<1.2
Beam Roundness (%)	>90
Beam Diameter (mm)	< 3
Beam Divergence (mRad)	<1.5
Point Stability (μrad/°C)	< 20
Polarization Ratio	100:1 Linear,Horizontal
Pulse-to-Pulse Stability (%RMS)	< 2
Average Power Stability (%over 12 hours)	< 3
Cold Start Warm-up (mins.)	< 40
Standby Warm-up (mins.)	< 15
Operational Temperature Range (°C)	15-40℃
Operation Humidity Range (%)	20 to 80,Non-condensing
Storage Temperature Range (°C)	- 10 to 60
Storage Humidity Range (%)	20 to 80,Non-condensing
Input Voltage (VDC/Watts)	24±5%/600
Rated Power (W)	< 400
Communication	RS232
Cooling	Water
Weight (kg)	22

AMARK Series

AMARK- 355 Laser CAD Drawing



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