DUMA OPTRONICS LTD.
Innovative optronics Instrumentation

DRAWINGS

SAM3

VIDEO

The application program is compatible with Windows 7/8/10 OS (32 & 64 bit). For custom integration, an ActiveX package software is offered as standard.

Ordering Information

BeamOn-VIS-NIR-SAM3-HP-A: 350-1310nm spectral range with high power attenuator and mounting adapter

Overview

Duma's High Power Laser Measuring Device is a robust all-in-one instrument with built-in state-of-the-art air-cooled beam dump, operating from 350 - 1600 nm lasers. It will measure M², BPP (Beam Propagation Parameters), Beam size at its focal position down to less than 100 microns. A unique feature allows measurement of power variation at a rate of 5 times per second.
A special user-friendly software will display results on an industrial computer or using a USB interface for customer's computer.

Specifications

Beam size range	⌀200 µm - ⌀4.5 mm
Spectral region	350 - 1310 nm
Power range @900/1070 nm	CW 1-2500 W, Pulsed 1 - 1000 W
Maximum power density	100,000 W/cm2
CCD focal position	Optical distance from input surface to senior's active surface is 38.1 ± 0.2 mm
Power from back side of beam sampler	90% of input power
Power measuring	After user's calibration

Mechanical Specifications

Dimensions	⌀64 mm x 92 mm deep
Cooling Conditions	Pressurized air of 6-8 Bar
Environment Operating Temperature	0 - 35 C
Weight	350 gr with cable

CCD Specifications

Camera type	Monochrome CCD 1/2" format
Sensor active area	6.47 (w) x 4.83 (h) mm (1/2" compatible)
Pixel size	8.6 µm (H) x 8.3 µm (V)
Power consumption	12 V, 0.9 W
Shutter speed	1/50 s to 1/100,000 sec, 9 steps manually, or automatically
Software controlled gain	6 - 60 dB manually, or automatic, 16 steps
Maximum frame rate	25 Hz
Null	In CW mode, null function is abialable to automatically subtract background
Operation with pulsed lasers	Ability to capture and replay pictures and statistics from a slowly pulsing laser (1-100 Hz) while filtering out frames with no laser pulse. Gain control and external filters make it easy ti obtain optimum intensity
Trigger	In pulsed mode, sliding bar control allows setting of threshold so as to display only frames with captured pulses
Max. frequency for single pulse display	10 kHz

Inquiry Form