

45mJ Laser Target Designator with Rangefinder

Model:JIO-LD45M



Features

- With the function of setting the irradiation period, and can be laser irradiation according to the set period.
- It has the function of setting and storing pseudorandom code sequence, and can be irradiated according to the set code sequence.
- With laser single and repeated ranging functions.
- With multi-target ranging function.
- It has the temperature output function of the core parts of the device.
- It has the function of protecting the rangefinder & irradiator from overheating.
- It has the function of status information output of rangefinder & irradiator.

Product features:

1. Wide temperature non-thermal system design, strong anti-tuning ability, good optical axis stability, can achieve a wide temperature range of work;
2. Using unique pulse detection and automatic compensation technology, high energy stability;
3. Choose active Q-switching pump mode, fine adjustment step, high coding precision.

Product performance indicators

Model	JIO-LD45M		
Item	Unit	Parameter	Remarks
Wavelength	nm	1060±5	
Laser average energy	mJ	≥45	
Energy stability (RMS)	%	≤8	
Laser beam divergence Angle	mrad	≤0.3	
Laser emission axis stability	mrad	≤0.05	
The laser emission axis no parallelism to the mounting base plane		≤3'	
Laser pulse width	ns	10-22	
Illumination distance	Km	≥3km (ground);	5km (air-to-ground);
Ranging capability	Km	8km	Visibility 15km, ranging distance for large targets
	Km	Maximum: ≥4km Minimum: ≤200m	Under the condition that the visibility is not less than 10km, the low small and slow UAV (equivalent size 0.2m×0.2m)
Range repetition rate	Hz	5	
Range accuracy (RMS)	m	≤ ±2	
Range rate	%	≥ 98	
Laser coding CT	ms	40 ~ 100	Set by communication protocol
Laser coding timing accuracy	μs	≤ ±1	
Operating temperature	°C	-40 ~ +60	
Storage temperature	°C	-55 ~ +70	

Mechanical and optical interfaces

