ADVANCED SENSING SOLUTION

MYK VISION

Precision • Innovation • Reliability

MYK-1535/MB

Eye-Safe Laser Ranging Module

Compact | Precise | Reliable | Eye-Safe



The **MYK-1535/MB Eye-Safe Laser Ranging Module** is a high-performance rangefinder designed for industrial, robotics, EO/IR payloads and unmanned systems. It ensures accurate **distance measurement** up to **4000m** with **±1m** accuracy using **1–3Hz** TOF operation and multi-target detection.

10m – 4000m	±1m	1–3Hz	Eye-Safe
Range	Accuracy	TOF Operation	Class 1

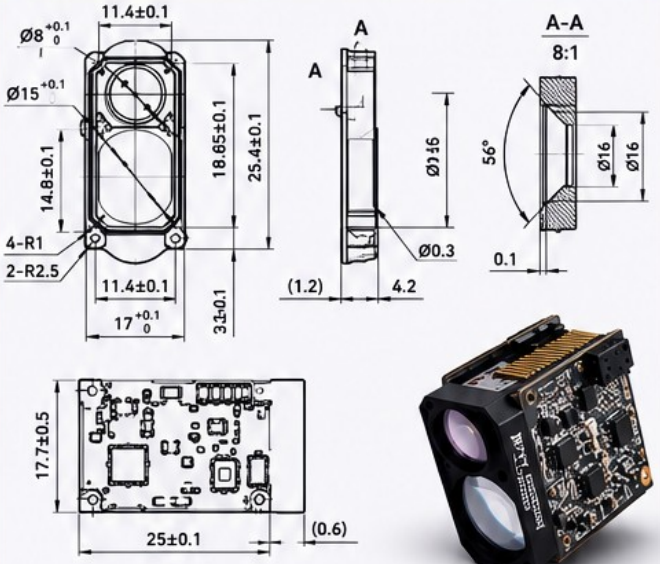
KEY HIGHLIGHTS

- UP TO **4000m** RANGE
- UP TO **3 TARGETS** DETECTION
- **1535±5nm** LASER WAVELENGTH
- LOW POWER CONSUMPTION **≤1.1W**
- COMPACT & LIGHTWEIGHT **14g**
- **UART** (TTL 3.3V) INTERFACE

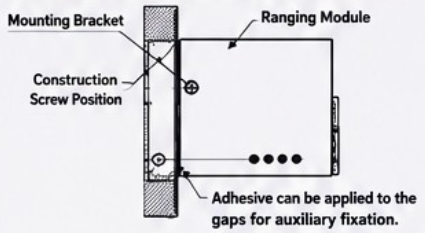
TECHNICAL SPECIFICATIONS

CATEGORY	PARAMETER	SPECIFICATION
PERFORMANCE INDICATORS	Laser Wavelength	1535 ± 5nm
	Eye Safety	Class 1 (IEC 60825-1)
	Divergence Angle	≤ 0.6 mrad
	Laser Energy	≥ 100 μJ
	Field of View (FOV)	~7.4 mrad
	Maximum Measuring Range (Visibility > 8km)	≥4000m @60% Reflectivity (Building Target) ≥3000m @30% Reflectivity (2.3×2.3m Target) ≥1500m @30% Reflectivity (0.5×1.7m Target) ≥800m @30% Reflectivity (0.2×0.3m Target)
	Minimum Range	≤ 10 m
	Ranging Frequency	1Hz ~ 3Hz
	Multi-Target Detection	Up to 3 targets
	Ranging Accuracy	±1 m
	Accuracy Rate	≥98%
	False Alarm Rate	≤1%
ELECTRICAL SPECIFICATIONS	Interface Type	UART (TTL 3.3V)
	Power Supply Voltage	DC 3 – 5V
	Standby Power Consumption (Full Temperature Range)	≤10mW (Power on pulled low) ≤0.8W (Power on pulled high)
	Operating Power Consumption (Full Temperature Range)	5V: ≤0.9W @1Hz 5V: ≤1.1W @3Hz
	Peak Power Consumption	≤3W
PHYSICAL & ENVIRONMENT	Start-up Time	≤350ms (After startup, response time <20ms)
	Weight	≤ 14 ± 1g
	Dimensions (L×W×H)	27 × 25 × 15.5 mm
	Shock	1200g, 1ms
	Vibration	5–50.5 Hz, 1 octave/min, 2.5g
	Operating Temperature	-40°C ~ +70°C
	Storage Temperature	-45°C ~ +70°C
	Reliability	MTBF > 1500h

MECHANICAL DIMENSIONS (mm)



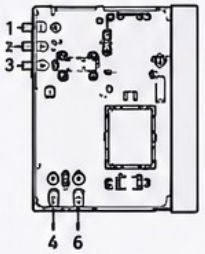
INSTALLATION DIAGRAM



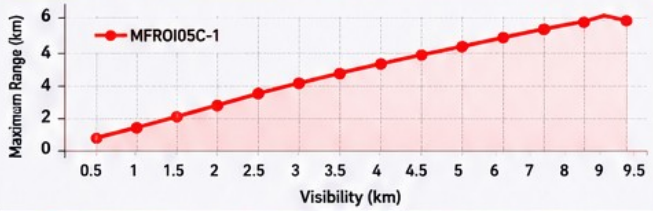
Weight ≤ 14 ± 1g

PIN INTERFACE (UART – TTL 3.3V)

PIN	SIGNAL	DESCRIPTION
1	POWER_ON	Module Power Switch, TTL 3.3V Level; Module On (~2.7V), Module Off (~0.3V)
2	UART_RX	Serial Port Receiver, TTL 3.3V Level
3	UART_TX	Serial Port Transmitter, TTL 3.3V Level
4	NC	—
5	Power Positive	Power Supply, 3–5V
6	GND	Serial Port Ground



RANGE PERFORMANCE vs VISIBILITY



TYPICAL APPLICATIONS

Drones & UAVs | Robotics | EO/IR Payloads | Industrial Automation | Mapping & Surveying | Surveillance Systems

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MYK Vision

Engineering Precision. Delivering Performance.