## LRF1550S Eye-Safe Laser Rangefinding Module



## Product Features

- Ultra-long rangefinding, industry-leading detection distance
- Ultra-light weight, the lightest rangefinding module in the industry with a comparable performance
- High measuring frequency up to 10 Hz


Remote Measuring


Compact Size


Class 1 Eye-Safe


Light Weight


Stable Performance

Mono-Pulse

## Applications

- Airborne PTZ, border and sea defense, high performance pods, vehicle-mounted optoelectronics


Airborne PTZ


High Performance Pods Vehicle-Mounted Optoelectronics

| Model |  | LRF1550S |
| :---: | :---: | :---: |
| Eye-Safe |  | Class1/1M |
| Laser Wavelength |  | $1535 \pm 5 \mathrm{~nm}$ |
| Optical Receiving Aperture |  | Ф52mm |
| Beam Divergence Angle |  | $\sim 0.3 \mathrm{mrad}$ |
| Dimensions ( $\mathrm{L} \times \mathrm{w} \times \mathrm{h}$ ) |  | $104 \times 64 \times 73 \mathrm{~mm}$ |
| Maximum Range | Large Targets | $20000 \mathrm{~m}^{21}$ |
|  | Vehicle | $15000 \mathrm{~m}^{2)}$ |
|  | Person | $6700 \mathrm{~m}^{2 /}$ |
|  | Uav | $3700 \mathrm{~m}^{2 /}$ |
| Minimum Range |  | 100 m |
| Weight |  | $\leqslant 330 \mathrm{~g}$ |
| Measuring Frequency |  | $1 \sim 5 \mathrm{~Hz}$ |
| Distance Measuring Accuracy |  | $\pm 2 \mathrm{~m}$ |
| Range Resolution |  | 30 m |
| Accuracy |  | $\geqslant 98 \%$ |
| False Alarm Rate |  | $\leqslant 1 \%$ |
| Multi-Target Detections |  | Up to 5 targets |
| Data Interface |  | UART(TTL_3.3V) |
| Power Supply |  | DC 9~15V |
| Standby Power Consumption |  | $\leqslant 200 \mathrm{~mW}$ |
| Peak Power Consumption |  | $\leqslant 10 \mathrm{~W}$ |
| Operating Temperature |  | $-40^{\circ} \mathrm{C} \sim+65^{\circ} \mathrm{C}$ |
| Storage Temperature |  | $-55^{\circ} \mathrm{C} \sim+75^{\circ} \mathrm{C}$ |
| Vibration |  | 0.01~0.04g2/Hz,20~2000Hz |
| Shock |  | $75 \mathrm{~g}, 6 \mathrm{~ms}$ |

Notes: 1) Vehicle target size: $2.3 \mathrm{~m} \times 4.6 \mathrm{~m}$; human target size: $0.5 \mathrm{~m} \times 1.7 \mathrm{~m}$; UAV target size: $0.2 \mathrm{~m} \times 0.3 \mathrm{~m}$; reflectance: $30 \%$, visibility $\geqslant 15 \mathrm{~km}$; 2) Vehicle target size: $2.3 \mathrm{~m} \times 4.6 \mathrm{~m}$; human target size: $0.5 \mathrm{~m} \times 1.7 \mathrm{~m}$; UAV target size: $0.2 \mathrm{~m} \times 0.3 \mathrm{~m}$; reflectance: $30 \%$, visibility $\geqslant 23.5 \mathrm{~km}$.

