Optical Sensors

Long-range Lasermeter / Q0-LM1





Long-range Lasermeter

The QO-LM1 laser rangefinder, developed by Quark Optical, is a product that stands out for its compact design and high performance. The QO-LM1, which benefits from APD technology, can measure distances up to 10 km. This makes it suitable for use in a variety of industries, including construction, engineering, forestry, geology, security, and disaster management. The QO-LM1 displays the measured distances to the user on the integrated display. This display has a wide and bright LCD panel for easy readability. The device can measure 10 times per second. This makes it possible to obtain fast and accurate results. The QO-LM1 comes with continuous and single measurement modes. In continuous measurement mode, the device continuously measures distances and displays the measurement values on the screen. In single measurement mode, the user can make a measurement at any time. The device can display measurements to the user in a variety of units. These units include meters,

centimeters, feet, inches, and yards. This allows users to choose the units that best suit their needs. The QO-LM1 is powered by a rechargeable lithium-ion battery. This battery allows for up to 1000 single measurements. The QO-LM1 can be controlled via RS485 and Bluetooth, optionally, to expand its range of use. This allows the device to be controlled remotely, via a computer, or with a microcontroller (such as a drone controller).

Feataures

- Distance measurement up to 10 km with APD technology
- Easy range readability with the integrated display
- Continuous and single measurement modes
- Rechargeable lithium-ion battery
- Controllability via RS485 and Bluetooth

O Applications

- Construction
- Engineering
- Military
- Security
- Foresting

\blacksquare Absolute Maximum Ratings and Electrical Characteristics ($T_A = 25^{\circ}$ C)

Parametre	Sembol	Min	Tipik	Maks	Birim
Charging Voltage	V _{IN}	4.5	5	5.5	V
Operating Temperature	T_{OPR}	-20	25	60	°C
Storage Temperature	T_{stg}	-20	25	70	°C
Number of Measurements	-	900	1000	1100	-
Laser Power	P _{LASER}	-	50	80	W
Laser ON Time	T _{LASER-ON}	-	50	100	ns
Laser Wavelength	λ_{c}	-	905	-	nm
Weight	M	-	100	-	g