



\$549.00

Import charges included

up to 4 x \$137.25 with no interest

\$20.00 off orders over \$159.00

SF22C 100m LiDAR obstacle avoidance altimeter Pixhawk Lightware SF22/C

by Ailanda China Store (4.3 | 379 sold )

Specifications

Power Source	Other	Inbox adaptor	No
Hign-concerned Chemical	None	Communication method	other
Model Number	Lightware SF22/C	Brand Name	FDROBOT
Power Source	Other	Origin	Mainland China
Certification	CE,FCC,RoHS,UL		

## Features

- **Application:** *API development for LiDAR applications*
- **Key features:** *Multiple return signals, signal strength, noise measurement etc.*  
*Upgradable through the **LightWare Studio** application*
- **Measuring range:** *0.2 ... 100 m (80% reflective, large target)*
- **Size:** *40 mm x 30 mm x 20 mm*
- **Weight:** *10 grams*
- **Measuring speed:** *10 to 1000 readings per second (configurable)*
- **Interfaces:** *Serial, I2C and USB*
- **Integration:** *User APIs, **LightWare Studio***
- **Safety:** *Eye safe laser emission Class 1M*
- **Environmental:** *Open frame, no IP rating*

## 2. Specifications

Performance	
Range	0.2 ... 100 m (white wall in daylight conditions)
Resolution	1 cm
Update rate	10 ... 1000 readings per second
Accuracy	±10 cm
Connections	
Power supply voltage	4.5 V ... 5.5 V
Power supply current	100 mA
Outputs & interfaces	Serial and I2C (3.3 V), micro USB
Mechanical	
Dimensions	40 mm x 30 mm x 20 mm
Weight	10 g (excluding cables)
Optical	
Laser safety	Class 1M (refer to <a href="http://www.lightware.co.za/safety">www.lightware.co.za/safety</a> for full details)
Optical aperture	28 mm x 15 mm
Beam divergence	< 0.5°
Environmental	
Operating temperature	-10 ... +50°C
Approvals	FDA: 1710193-000 (2019/08)
Enclosure rating	N/A

Accessories	
Main cable	Main cable - 6 way, DigiKey 455-3003-ND; Mating socket, DigiKey 455-1806-1-ND
USB cable	USB cable - DigiKey AE10418-ND
Default settings	
Serial port settings	115200 baud, 8 data bits, 1 stop bit, no parity, no handshaking
I2C address	0x66 (Hex), 102 (Dec)
Update rate	20 readings per second
Main cable connections	
1	GND - power supply negative
2	+ 5 V - power supply positive (4.5 V to 5.5 V at 100 mA)
3	TXD - serial data transmitted
4	RXD - serial data received
5	SCL - I2C clock line
6	SDA - I2C data line

#### 4.1. Labelling

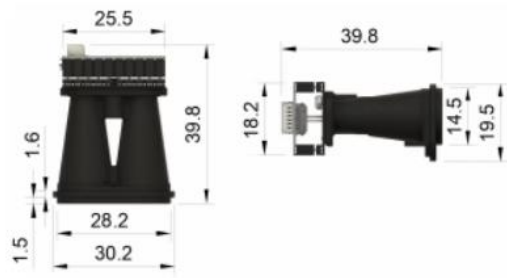


*Laser radiation information and product identification labels*

#### 4.2. Laser radiation information

Specification	Value / AEL	Notes
Eye safety classification	Class 1M	
Laser wavelength	905 nm	
Pulse width	15 ns	
Pulse frequency	20 kHz	
Average power	< 2.5 mW	
NOHD	0.5 m	Distance beyond which binoculars with may be used safely

### 5.1. Dimension drawings



*Dimension drawings, units in mm*

### 5.2. Installation

SF22/C requires a clear line-of-sight to measure distance to a target surface. It can be mounted with a vertical or horizontal lens orientation.

