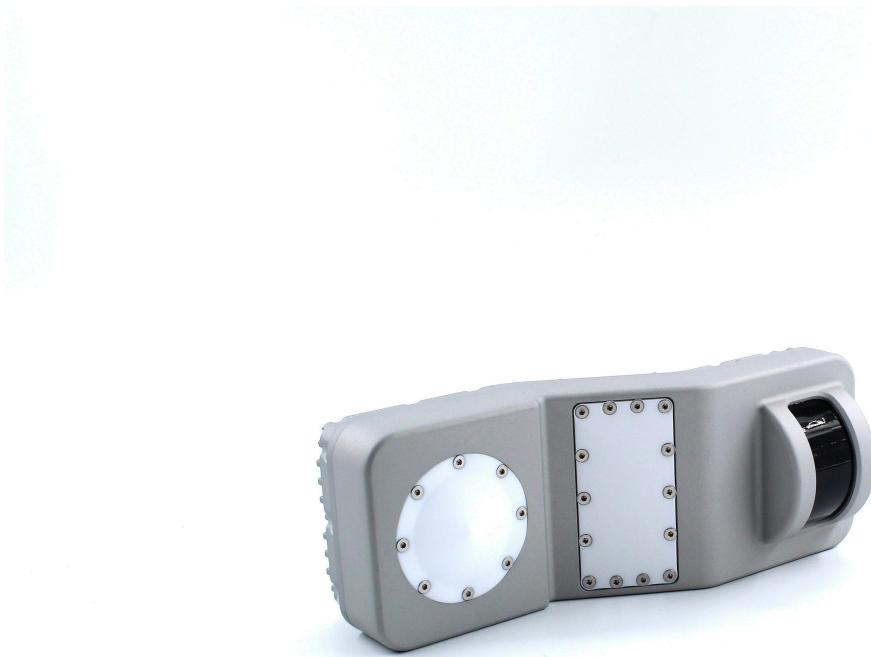


## DATASHEET

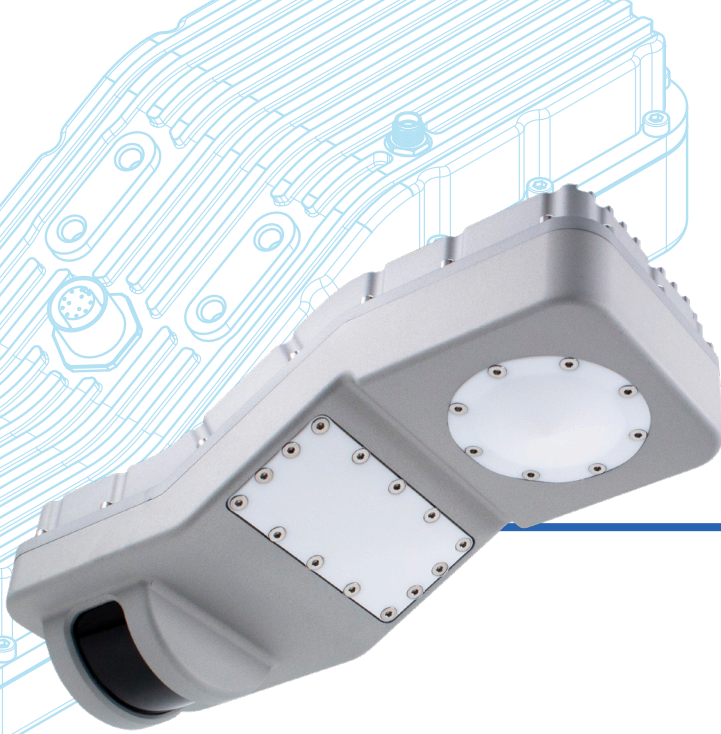
# FX200-30

Geolux

Distributed by AKRIBIS



# NON-CONTACT OPEN CHANNEL FLOW VELOCITY & LEVEL METER + LIDAR CHANNEL SCANNER FX200



## Applications

- Early flood warning systems
- Flow monitoring in irrigation channels
- Accurate discharge monitoring in rivers
- Sewage and waste water discharge measurement

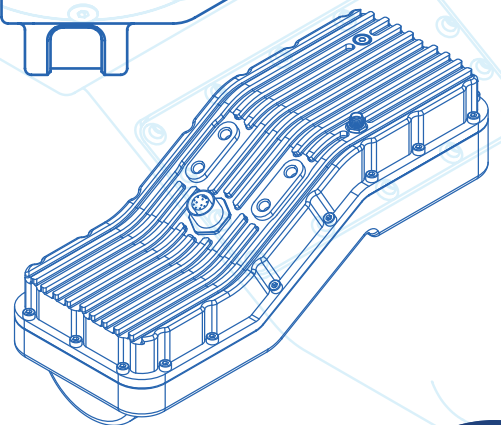
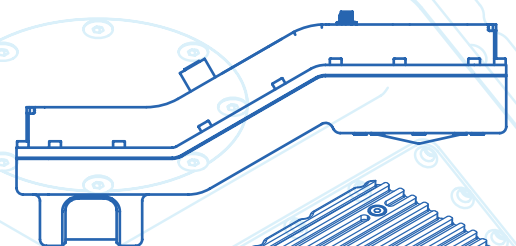
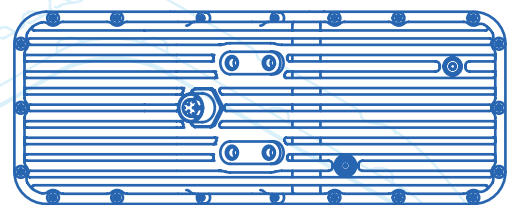
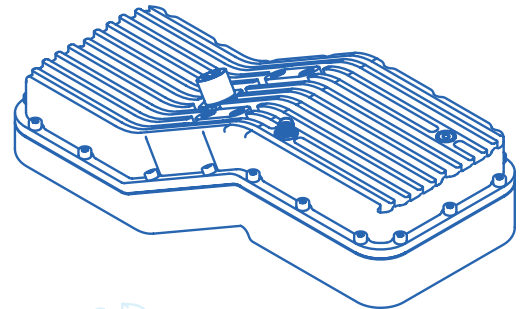
## Product Description

The Geolux FX200 is an integrated instrument utilizing advanced FMCW 4D surface velocity radar and FMCW water level radar meter, and a LiDAR-based river channel scanner. Designed for non-contact measurement applications, the FX200 enables rapid deployment above water surfaces while minimizing maintenance requirements.

The FX200 is based on the advanced 4D radar processing that delivers superior performance compared to conventional Doppler-based surface velocity radars. While traditional Doppler sensors are susceptible to measurement degradation from ambient interference, precipitation, and structural vibration, the FX200's signal processing architecture ensures consistent, high-accuracy velocity measurements under all environmental conditions.

Calculation of the total flow discharge is internally implemented within the instrument by combining surface velocity measurement, water level measurement, and the configured cross-section of the river or channel. The cross-section of the river or channel can be automatically determined and updated by an on-board LiDAR scanner, eliminating the need for manual measurements of the channel cross-section.

- Contactless measurement of surface velocity, water level and river channel profile
- Integrated discharge (flowrate) calculation
- 4D radar processing increases sensitivity while eliminating environmental disturbances
- Robust, compact, IP68 aluminium or stainless steel enclosure

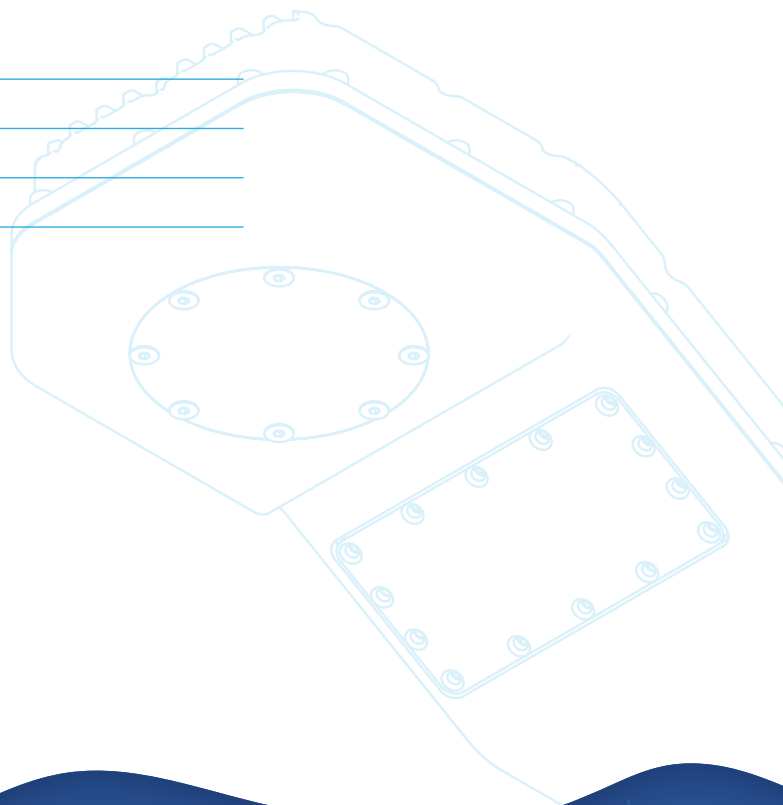


# FX200

## Detailed Specifications

|                                    |                                                                  |
|------------------------------------|------------------------------------------------------------------|
| <b>Detection Distance</b>          | 15 m / 30 m / 35 m                                               |
| <b>Speed Range</b>                 | 0.02 m/s to 16 m/s                                               |
| <b>Speed Resolution</b>            | 0.001 m/s                                                        |
| <b>Speed Accuracy</b>              | 1% of measured value<br>(in full measurement range)              |
| <b>Level Resolution</b>            | 1 mm                                                             |
| <b>Level Accuracy</b>              | ± 2 mm                                                           |
| <b>Sampling Rate</b>               | 1 sps                                                            |
| <b>IP Rating</b>                   | IP68                                                             |
| <b>Interfaces</b>                  | RS-232 / NMEA<br>RS-485 / Modbus Rtu<br>SDI-12<br>Analog 4-20 mA |
| <b>Connector</b>                   | M12 circular 12-pin                                              |
| <b>Input Voltage</b>               | 9 to 27 VDC                                                      |
| <b>Power Consumption</b>           | 1100 mW operational<br>30 mW standby                             |
| <b>Maximal Current</b>             | < 750 mA                                                         |
| <b>Operating Temperature Range</b> | -40°C to +85°C                                                   |
| <b>Operating Humidity Range</b>    | 0 – 100% RH                                                      |

FCC & CE **APPROVED**  
MADE IN **EU**



For more information, contact us:

Phone: +385 1 6701 241

E-mail: [geolux@geolux.hr](mailto:geolux@geolux.hr)

AKRIBIS - [www.akribis.info](http://www.akribis.info) - [contacto@akribis.info](mailto:contacto@akribis.info)

**Geolux**  
[www.geolux-radars.com](http://www.geolux-radars.com)