



FMS Flood Monitoring System

Applications

- Surface water
- Water quantity
- Flood monitoring
- Tide monitoring
- Storm water

IoT Device with Radar Water Level Sensor

Integrated flood monitoring and stream gauging solution

Contactless sensor that is easy-to-install and ideal for critical flood monitoring

Intuitive, wireless local operation using LinkComm software via Bluetooth Low Energy (BLE)

Connection to smart phones, tablets, and PCs operating with Android, iOS, or Windows 10

Remote monitoring via cellular communication with integrated modem

Global support for application-specific installation and maintenance guidance

Efficient Resource Allocation for Swift Response:

When minutes matter, timely notifications enable you to take proactive action if water levels exceed a certain threshold, accelerating necessary downstream actions ahead of a flood event.

Designed for Simple Installation and Use:

All-in-one solution with a radar level sensor, datalogger, modem, and power supply. The compact system with customized power supply options, allows you to easily setup a monitoring network with minimal experience.

Reliable and Robust Design for Peace of Mind:

Maintain confidence in all weather conditions with the IP67 housing, so you can focus on managing projects without worrying about equipment failure.

Best-in-Class User Experience:

Via the integrated Bluetooth (BLE) interface, operation with a smartphone or PC is extremely easy using the LinkComm software. The entire system can be configured from the office using the integrated modem.

Technical Specifications

WATER LEVEL (WITH OTT RLS 500)	Measuring range	0 ... 30 m; distance to water	0 ... 99 ft; distance to water
	Resolution	0.001 m · 0.1 cm · 1 mm	0.01 ft · 0.1 inch
	Accuracy for 0 ... 30 m	±2 mm	0.007 ft
	Accuracy for average temperature coefficient	< 3 mm/10 K; max. 5 mm	< 3 mm/10 K; max. 5 mm
	Units	m · cm	ft · inch
	Beam angle of antenna	8°	
	Transmission frequency	77 ... 81 GHz	
	Type of radar	FMCW Radar	
	Frequency band	W-band	
	Sampling Interval	5 sec ... 24 hrs	
POWER (Option Battery Only)	Integrated lithium battery only (with plug connector)	7.2 V / 13 A	
	Integrated lithium battery lifetime	> 10 years @ 20 °C ambient temperature with lithium battery, one hour sample interval, one transfer per day, one local communication (BLE) per month	
POWER (Option Solar Powered)	Integrated NiMH rechargeable battery including solar panel (with plug connector)	+ 6 V / 3.3 Ah	
	Solar panel	5 watts (optional 2 x 5 watts)	
RTC CLOCK	Accuracy	±26 seconds/month (at +25 °C / +77 °F) when using SNTP < ±3 seconds	
COMMUNICATION	Cellular 4G/2G (not available for USA)	LTE Cat-1 (4G); B1 (2100 MHz), B3 (1800 MHz), B7 (2600 MHz), B8 (900 MHz), B20 (800 MHz), B28 (700 MHz); GSM, GPRS, EDGE; 900 MHz, 1800 MHz	
	Cellular 4G CAT-M1/LTE-M (Global)	B1, B2, B3, B4, B5, B8, B9, B10, B12, B13, B17, B18, B19, B20, B25, B26, B27, B28, B66	
	Local communication	Bluetooth Low Energy (BLE) 5.0 - up to 10 m (free line of sight)	
DATA TRANSMISSION	Interval	1 minute ... 1 week, 15 minutes ... 24 hours for SMS	
	IP COM	FTP, FTPS, HTTP, HTTPS (TLS 1.2), MQTT, MQTTS	
DATA MEMORY	Measurement memory	28 MB (approx. 1,000,000 values)	
ENVIRONMENTAL	Temperature range, operating	-30 °C ... +85 °C	-22 °F ... +185 °F
	Temperature range, storage	-40 °C ... +85 °C	-23 °F ... +185 °F
	Humidity	5 % ... 95 % (non-condensing)	
	IP rating	IP 67 (flood-proof up to 1 week/ 1 m water column)	
DIMENSIONS/WEIGHT Sensorlink 1000	Dimension	L x W x H: 160 mm x 80 mm x 60 mm	L x W x H: 6.3 in x 3.1 in x 2.4 in
	Weight (incl. lithium battery)	approx. 0.9 kg	approx. 2 pounds
	Material	Aluminium	
DIMENSIONS/WEIGHT RLS 500	Dimension	L x W x H 137 mm x 134.5 mm x 90 mm	L x W x H 5.30 in x 4.51 in x 3.35 in
	Weight (without mounting)	approx. 0.75 kg	approx. 1.5 pounds
	Material Housing	Aluminium	
REGULATORY	FCC / IC / CE / ACMA	CE FC IC	
	PTCRB	According to NAPRD03 (only modem variant 4G Cat-M1/LTE-M)	
REGULATORY	Provider certifications	Verizon Open Development Certification, AT&T IoT Device Certification	



OTT SensorLink 1000 with Integrated Lithium Battery



OTT RLS 500 Smart Radar Level Sensor



Optional 5 Watt Solar Panel