





NILE RADAR SERIES

NON-CONTACT WATER LEVEL SENSORS

The WaterLOG® models **Nile 502/504/517** make up the **Nile** series of radar water level sensors. The rugged, innovative design was built for extreme environmental conditions—making this series ideal for tough to reach sites. Its reliable interface and simple SDI-12 communication ensure seamless integration with current water monitoring stations.

APPLICATIONS

Accurately measure river, lake, well, ocean and waste water levels through continuous, non-contact transmission.

KEY FEATURES

- High accuracy (±2.0 mm Nile 502)
- Out of the box measurement range up to 70 m (Nile 517)
- NEMA 4x (IP65) enclosure is suitable for outdoor installations
- Frequency range 26 Ghz
- Low current operation (<10 mA)
- Continuous operation, no warmup or "lock on"
- Mounting enclosures, radio communication links and other accessories are available
- Optional keypad display
- Capped antenna (Nile 502/504)
- Simple SDI-12 communication
- Surge protection



NILE 502



SPECIFICATIONS

MEASUREMENTS				
	Nile 502	Nile 504	Nile 517	
Accuracy	±2.0mm (0.079 in)	±3.0mm (0.118 in)	±3.0mm (0.118 in)	
Frequency	~26 GHz	~26 GHz	~26 GHz	
Transmitting Power	<0.4 nW/cm ²	<2.5 nW/cm ²	<2.5 nW/cm ²	
Range	20m (65.6 ft)	40m (131.2 ft)	70m (229.7 ft)	
Maximum Measurement error on low end	±4.0mm (<1m) 0.16in(<3.28ft)	±20.0mm (<2m) 0.78in(<6.56ft)	±20.0mm (<2m) 0.78in(<6.56ft)	
Beam Angle	10°	8°	8°	
Beam Width:				
3m (9.84ft)	.53m (1.74ft)	.42m (1.38ft)	.42m (1.38ft)	
6m (19.69ft)	1.05m (3.45ft)	.84m (2.76ft)	.84m (2.76ft)	
9m (29.53ft)	1.58m (5.18ft)	1.26m (4.13ft)	1.26m (4.13ft)	
12m (39.37ft)	2.10m (6.89ft)	1.68m (5.51ft)	1.68m (5.51ft)	
15m (49.22ft)	2.63m (8.63ft)	2.10m (6.89ft)	2.10m (6.89ft)	
20m (65.62ft)	3.50m (11.48ft)	2.80m (9.19ft)	2.80m (9.19ft)	
25m (82.03ft)		3.50m (11.48ft)	3.50m (11.48ft)	
30m (98.43ft)		4.20m (13.78ft)	4.20m (13.78ft)	
35m (114.84ft)		4.89m (16.04ft)	4.89m (16.04ft)	
40m (131.24ft)		5.59m (18.34ft)	5.59m (18.34ft)	
45m (147.65ft)			6.29m (20.64ft)	
60m (196.86ft)			8.39m (27.53ft)	
70m (229.67ft)			9.79m (32.12ft)	
COMMUNICAT	ION			
Output	SDI-12, RS-232			
POWER	00112,110202			
Voltage Input	10 to 16 VDC			
Supply Current	Sleep: <10 mA Active: <20 mA Startup: 16.2 mA			
ENVIRONMEN				
Operating Temperature	-40° C to + 80° C			
Storage Temperature	-40° C to + 80° C			
PHYSICAL				
Size (Housing)	168mm(6.61in) x	144mm(5.67in)		
Size (Horn)	80mm(3.15in), 115mm (4.53in) x 137.9mm(5.43in)	100mm(3.94in), 135mm(5.31in) x 150.5mm(5.93in)	100mm(3.94in), 95mm(3.74 in) x 282mm(11.10 in)	

Weight	2.7 kg	2.7 kg	4.2 kg
Material (Housing)	PBT Plastic	PBT Plastic	PBT Plastic
Material (Horn)	PP Cladded	PP Cladded	316L

WARRANTY

The WaterLOG® Nile series radars are warranted against defects in materials and workmanship for two years from date of shipment. For complete terms and conditions, visit http://www.ysi.com/terms-and-conditions.php

conditions.pnp	<u>///3.5/10</u>		
Note	For detailed specifications, see user manual.		
	Specifications subject to change without prior notice		
	due to ongoing commitment to product testing and		
	improvement, LR February, 2015 (D51 0215)		





