
Appendix A

Specifications

Measurement

Standard Range: 0.75 ft to 72 ft (0.3 m to 22 m)
Accuracy (including linearity, repeatability and hysteresis):
 <32 ft (10 m): ±0.12 in (±3 mm)
 >32 ft (10 m): ±0.03% of measuring range

Radar Unit

Frequency: ~26 GHz
Electromagnetic Compatibility:
 Emission to EN 61326
 Electrical Equipment Class B
Pulse Energy: 1mW max (1μW average)
Beam angle: 10° (3-in dia horn)
 8° (4-in dia horn)

Measuring Distance

Measuring Distance	Beam Diameter (3-in Horn)
10 ft (3 m)	1.75 ft (0.52 m)
20 ft (6 m)	3.50 ft (1.05 m)
30 ft (9 m)	5.25 ft (1.57 m)
40 ft (12 m)	7.00 ft (2.1 m)
49 ft (15 m)	8.57 ft (2.62 m)
65 ft (20 m)	11.37 ft (3.50 m)

SDI-12 Output

Baud Rate: 1200
Protocol: SDI-12, 7-bit even parity, 1 stop bit
Output Voltage Levels:
 Minimum high level: 3.5 volts
 Maximum low level: 0.8 volts

Response Time

SDI-12 measurement sequence: 1 sec (typ)
 5 sec (max)

Power Requirements

Voltage Input: 10 to 16 Volts DC
Surge Protection: Built in, 1.5 KVA
Supply Current:
 Sleep mode 7.6 mA typ
 Active (measuring) 12 mA typ
 Startup 18 mA max

Environmental

Operating Temperature: -40° C to +80° C
Storage Temperature: -40° C to +80° C
Temperature Sensitivity: average T_K : 2 mm/10 K,
 max 5 mm over the entire
 temperature range -40° C to
 +80° C

Mechanical

Rating: NEMA 4x
Housing: Aluminum, coated IP65
Horn size: 3-inch (L = 211 mm, d = 75 mm) *standard*
 4-inch (L = 282 mm, d = 95 mm) *optional*
Horn Material: 316L stainless steel
Internal Display: LCD with backlight

Connections

+12V & SDI-12: Internal 3-position connector.
 6-ft polyurethane pigtail is provided.
Cables: 6-ft cable with RS-232 connector for
 TofTool® is provided.

The **WATERLOG**® H-3611 is warranted against defects in materials and workmanship for one year from date of shipment.

Notes

Specifications subject to change without prior notice due to ongoing commitment to product testing and improvement.