

# Self Adjusting “Smart” IP68 Radar For Special Outdoor Flood Monitoring



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## FEATURES

Self Adjusting Tracking Radar  
Programmable (recommended) and  
Simple push-button calibration  
Output 4-20mA / 20- 4mA  
(Isolated on 4 Wire Model's only )  
Optional RS232 OR RS485  
For communications with calibration,  
diagnostics & data logging software  
PLC Compatible (Modbus RTU)  
Three or four Wire Operation

## APPLICATIONS

Flood Monitoring (RIVERS ,LAKES ,SEA WATER )  
Food and Beverages  
Water / Wastewater  
Chemicals with vapors

## MECHANICAL

Conduit Entry : 1/2" NPT x 2  
Enclosure : Aluminum or S.S. - 94V0  
Ingress Protection : NEMA Type 6 (IP68)

## ENVIRONMENTAL IP68

Temperature : - 40 to 140°F (- 40 to 60°C)  
Approvals : FCC Part 15 - Low Power  
Communication Device

## FM(USA)

FM3810 (2005) Electrical Electronic Test, Measuring and  
Process Control Equipment

ANSI/NEMA 250 (1991) :Enclosures for Electrical Equipment

## FM(CAN.):

CSA C22.2 No. 1010.1 (2004) Safety Requirements for Electrical  
Equipment for Measurement, Control and Laboratory Use

- Part 1: General Requirements

CSA C22.2 No. 94 (2011) Special Purpose Enclosures

Installation Category : Class II

## PROCESS

Temperature PP Rod : - 40 to 176°F (- 40 to 80°C)

Material Dielectric : Er > 1.4

Max. Pressure : 5 bar (without De-coupler)

**Catalogue #** - On the Web return to Home Page & Refer to

Catalogue Number Structure for Ordering information.

In Product Documentation refer to Page 4.

## TECHNICAL SPECIFICATIONS

Model	Range	Res.	Accuracy	I P	Operation
ABM300 -017R6 R2C2- ALHR4 (6)	5 m	+/- 3 mm	+/-0.03%	IP68	6.3 GHz 26 GHz
ABM300 -033R6 R2C2- ALHR4 (6)	10 m	+/-3 mm	+/-0.03%	IP68	6.3 GHz 26 GHz
ABM300 -050R6 R2C2- ALHR4 (6)	15 m	+/- 3 mm	+/-0.03%	IP68	6.3 GHz 26 GHz
ABM300 -100R6 R2C2- ALHR4 (6)	30 m	+/- 3 mm	+/-0.03%	IP68	6.3 GHz 26 GHz
ABM300 - 140R6 R2C2- ALHR4 (6)	42 m	+/- 3 mm	+/-0.03%	IP68	6.3 GHz 26 GHz
ABM300 - 240R6 R2C2- ALHR4 (6)	73 m	+/-3 mm	+/-0.03%	IP68	6.3 GHz 26 GHz
ABM300 - 340R6 R2C2- ALHR4 (6)	103.6 m	+/-3 mm	+/-0.03%	IP68	6.3 GHz 26 GHz



**Antenna Horn**



**Antenna Rod**

**Note - Minimum Range starts at the lower tip of the antenna or horn bottom for high dielectric materials (water). For low dielectric materials allow longer Minimum Range.**

## OPERATIONAL

**Response Time** : Standard Unit 2 - 3 echo's / sec.  
: Std. with less damping 6 echo's / sec.  
: Fast Protocol Unit 10 - 30 echo's / sec.

**Frequency** : 6.3 GHz. or combine 6.3 GHz & 26 GHz

**Loss of Echo** : Hold 3 min., 22mA or 2 mA. output

**Transmit Power**: 50 uW average

**Calibration** : Via communications port (required)

**Diagnostics** : (Echo Profile) via communications port

**Antenna** : Horn HR4 / HR6 - 4" or 6" Dia.

: Dielectric rod Std. Polypropylene APP  
or Optional Teflon ATE

## ELECTRICAL SPECIFICATIONS

Power	Description
ABM300 DC	12 to 30 VDC , 0.07 A max @ 24 Vdc R load = (Vs - 6) / 24 mA
Output	4-20 mA Output 6.1 uA resolution
	750 Ohms (Isolated on 4 Wire only) Optional RS232 or RS485 communications port.