

Radar Applications



Liquid Level Monitoring

Radar is ideal for monitoring liquids with vapors, gases or volatile surfaces. Choose a radar sensor with the range for your application.



Solid Material Level Monitoring

For dusty solids and powder applications, the dual frequency and higher 26 GHz frequency radar models help to penetrate the dusty environment found in solids-level storage silos and bins.

Explosion Proof Applications

For measurement in areas classified as hazardous (Class I, Division 1), such as those with gases, petrochemicals, vapors, and dust. These areas require containment of the atmosphere.

Interface Detection Applications

Ideal for monitoring the interface between liquids and solids, such as oil-water. The non-contact radar sensor measures the oil-water interface and the top of the oil. The current output shows both levels.



Sanitary / Hygienic Applications

Ideal for sanitary/hygienic applications, the radar sensor has a food-grade Teflon antenna with sanitary ferrule tri-clamp mounting. The sensor withstands steam cleaning or clean-in-place (CIP), is quickly removable, and easily re-installed.

High Temperature Applications

The radar sensor is ideal for applications with elevated process temperatures and has a Teflon decoupler designed for thermal isolation. Environmental (ambient) temperature does not affect the sensor's performance. A horn antenna with a bottom flange is recommended for very high temperature applications above 177°C (350°F).



High Pressure Applications

A radar sensor with a special high-pressure Teflon antenna is used for monitoring processes with elevated pressure up to 70 bar (1015 PSI).

Remote Monitoring Applications

Remote non-contact radar level sensors have a built-in cellular modem for remote communication and ABM support. Continuous power and battery or solar panel (wireless) power options are available.

Outdoor Flood Monitoring

The dual frequency radar is used to reliably monitor levels of rivers, lakes and oceans without influence from weather conditions. The radar works even in dry seasons when there is no water in riverbeds.



Marine Fast Response Applications

The radar with fast response protocols (10 to 30 updates per second) is ideal for measuring wave profiles to control optimal vessel trimming.

Anti-Collision Systems

An anti-collision system based on two radar sensors operating at different frequencies maintains a safe working distance between two cranes operating on the same track.

Non-Contact Radar Level Sensors

An electromagnetic pulse is transmitted from the sensor. The pulse travels to the surface being monitored and is reflected off the surface back to the sensor. The time-of-flight is divided by two and converted to an output signal directly proportional to the level.

Radar should be your choice when dealing with challenging environments such as vapor, temperature variations, extreme temperatures, extreme dust, wind, foam, ice or acoustic noise.

Family	Application	Maximum Range	Frequency	Process Temperature	Process Pressure	Antenna	Mounting
R-LIQ	Liquids	Up to 340 ft (103.6 m)	6.3 GHz 5.8 GHz	-40 to 80°C (-40 to 176°F)	≤ 5 Bar (72.5 psi)	Teflon Rod or SS316L Horn	1.5", 2" or 3" NPT
R-SLD	Solid Material	Up to 340 ft (103.6 m)	6.3 / 26 GHz 26 GHz 26 / 78 GHz	-40 to 80°C (-40 to 176°F)	≤ 5 Bar (72.5 psi)	SS316L Horn	3" NPT
R-EXP	Explosion Proof (Class I, Division 1)	Up to 240 ft (73.2 m)	6.3 GHz 5.8 GHz	-40 to 80°C (-40 to 176°F)	≤ 5 Bar (72.5 psi)	Teflon Rod or SS316L Horn	1.5", 2" or 3" NPT
R-ID	Interface Detection (Class I, Division 1)	Up to 240 ft (73.2 m)	6.3 GHz 5.8 GHz	-40 to 80°C (-40 to 176°F)	≤ 5 Bar (72.5 psi)	Teflon Rod	1.5" or 2" NPT
S-SAN	Sanitary / Hygienic	Up to 100 ft (30.5 m)	6.3 GHz 5.8 GHz	-40 to 204°C (-40 to 400°F)	≤ 2 Bar (29 psi)	Food Grade Teflon Rod	2" Tri-Clamp
R-HT	High Temperature	Up to 100 ft (30.5 m)	6.3 GHz 5.8 GHz	-40 to 177°C (-40 to 350°F)	≤ 2 Bar (29 psi)	Teflon Rod with Decoupler	2" or 3" NPT
R-VHT	Very High Temperature	Up to 100 ft (30.5 m)	6.3 GHz 5.8 GHz	-40 to 300°C (-40 to 572°F)	≤ 2 Bar (29 psi)	SS316L Horn with Bottom Flange	8" Flange
R-HPR	High Pressure	Up to 100 ft (30.5 m)	6.3 GHz 5.8 GHz	-40 to 80°C (-40 to 176°F)	≤ 70 Bar (1015 psi)	High Pressure Teflon Rod	1.5", 2" or 3" NPT
R-RM	Remote Monitoring (continuous power)	Up to 340 ft (103.6 m)	6.3 GHz 5.8 GHz 6.3 / 26 GHz	-40 to 80°C (-40 to 176°F)	≤ 5 Bar (72.5 psi)	Teflon Rod or SS316L Horn	1.5", 2" or 3" NPT
R-RMB	Remote Monitoring (battery or solar panel)	Up to 340 ft (103.6 m)	6.3 GHz 5.8 GHz 6.3 / 26 GHz	-40 to 80°C (-40 to 176°F)	≤ 5 Bar (72.5 psi)	Teflon Rod or SS316L Horn	1.5", 2" or 3" NPT
R-FM	Flood Monitoring	Up to 340 ft (103.6 m)	6.3 / 26 GHz	-40 to 80°C (-40 to 176°F)	≤ 5 Bar (72.5 psi)	SS316L Horn	3" NPT
R-FR	Fast Response	Up to 340 ft (103.6 m)	6.3 GHz 5.8 GHz	-40 to 80°C (-40 to 176°F)	≤ 5 Bar (72.5 psi)	Teflon Rod or SS316L Horn	1.5", 2" or 3" NPT
R-AC	Anti-Collision	Up to 240 ft (73.2 m)	6.3 GHz and 26 GHz	-40 to 80°C (-40 to 176°F)	≤ 5 Bar (72.5 psi)	Teflon Rod or SS316L Horn	3" NPT

Non-Contact Radar Level Sensors for Liquid Applications | R-LIQ



The R-LIQ pulse radar level sensor is the ideal solution for liquid level applications in challenging environments with vapours, gases, foaming, ice or volatile surfaces.

Features

- Maintenance-free, non-contact continuous level measurements
- Build-up resistant Teflon rod antenna (sheds condensation) or SS316L horn antenna options
- Plug-and-play installation with simple calibration
- 2-wire loop-powered, 3-wire or 4-wire operation
- 4-20 mA / 20-4 mA output standard
- Optional HART, RS232 or RS485 communications with free calibration, diagnostics and data logging software
- PLC compatible (Modbus RTU)
- Aluminum and SS316L housing options to withstand any environment
- Ingress protection IP68 rating (NEMA 6)



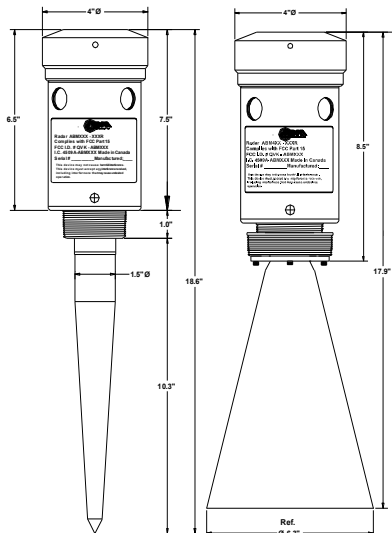
Applications

Liquid level measurement for: Water, Wastewater, Chemical, Food, Beverage and more.

Technical Data	
Measuring Range:	Up to 340 ft (103.6 m)
Temperature:	-40 to 80°C (-40 to 176°F)
Pressure Rating:	≤ 5 Bar (72.5 psi)
Mounting:	1.5" - 3" NPT

Catalogue Number Ordering		
Supply Voltage:	16-30 VDC Loop-Powered (2-wire)	200
	12-30 VDC Power (3-wire)	300
	115 VAC Power (4-wire)	400
	230 VAC Power (4-wire)	430
Maximum Range:	17 ft (5.2 m)	017
	33 ft (10.1 m)	033
	50 ft (15.2 m)	050
	100 ft (30.5 m)	100
	140 ft (42.7 m)	140
	240 ft (73.2 m)	240
Frequency:	17 ft (5.2 m)	340
	33 ft (10.1 m)	
	50 ft (15.2 m)	
	100 ft (30.5 m)	
Frequency:	5.8 GHz	R5
	6.3 GHz	R6
Communication:	HART	CH
	RS232	C2
	RS485	C4
Enclosure:	Aluminum	AL
	SS316L	SS
Antenna:	Teflon Rod 10" (extendable)	ATE
	Teflon Rod 12"	ATL
	SS316L Horn 6"	HR6

Dimensions



Model:	ABM	- - -	-	- - -	- -	- -	-	- - -	- - -
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Non-Contact Radar Level Sensors for Solid Material Applications | R-SLD



The R-SLD pulse radar level sensor is the ideal solution for solid material level applications in challenging environments with temperature variations, heavy dust, or acoustic noise.

Features

- No influence from heavy dust, tracks during filling conditions
- Maintenance-free, non-contact continuous level measurements
- Build-up resistant Teflon rod antenna or SS316L horn antenna options
- Swivel aimer mounting recommended for optimal performance
- Plug-and-play installation with simple calibration
- 2-wire loop-powered, 3-wire or 4-wire operation
- 4-20 mA / 20-4 mA output standard
- Optional HART, RS232 or RS485 communications with free calibration, diagnostics and data logging software
- PLC compatible (Modbus RTU)
- Aluminum and SS316L housing options to withstand any environment
- Ingress protection IP68 rating (NEMA 6)



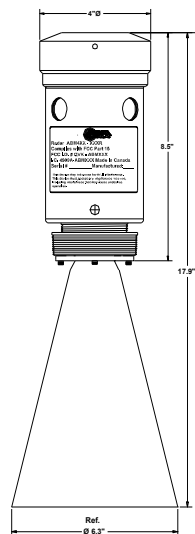
Applications

Solid level measurement for: Cement, Aggregates, Plastics, Animal Feed and more.

Technical Data	
Measuring Range:	Up to 340 ft (103.6 m)
Temperature:	-40 to 80°C (-40 to 176°F)
Pressure Rating:	≤ 5 Bar (72.5 psi)
Mounting:	3" NPT

Catalogue Number Ordering		
Supply Voltage:	16-30 VDC Loop-Powered (2-wire) 12-30 VDC Power (3-wire) 115 VAC Power (4-wire) 230 VAC Power (4-wire)	200 300 400 430
Maximum Range:	17 ft (5.2 m) 33 ft (10.1 m) 50 ft (15.2 m) 100 ft (30.5 m) 140 ft (42.7 m) 240 ft (73.2 m) 340 ft (103.6 m)	017 033 050 100 140 240 340
Frequency:	6.3 / 26 GHz 26 / 78 GHz 26 GHz	R6R2 R2R7 R2
Communication:	HART RS232 RS485	CH C2 C4
Enclosure:	Aluminum SS316L	AL SS
Antenna:	SS316L Horn 6" SS316L Horn 5"	HR6 HR5

Dimensions



Model:	ABM	-	-	-	-	-	-	-	-	-	SOLIDS
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Non-Contact Radar Level Sensors for Explosion Proof Applications | R-EXP



The R-EXP pulse radar level sensor is the ideal solution for liquid, slurry or solid materials with heavy dust, vapours, gases, foaming, ice or volatile surfaces in areas classified as hazardous.

Features

- Explosion proof - Class I, Division 1 (CID1) approvals
- Maintenance-free, non-contact continuous level measurements
- Build-up resistant Teflon rod antenna or SS316L horn antenna options
- Plug-and-play installation with simple calibration
- 2-wire loop-powered or 3-wire operation
- 4-20 mA / 20-4 mA output standard
- Optional HART, RS232 or RS485 communications with free calibration, diagnostics and data logging software
- PLC compatible (Modbus RTU)
- Aluminum and SS316L housing options to withstand any environment
- Ingress protection IP68 rating (NEMA 6)



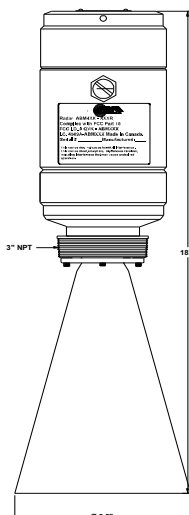
Applications

Level measurement for: Petrochemical, Wastewater, Chemical, Beverage and more.

Technical Data	
Measuring Range:	Up to 240 ft (73.2 m)
Temperature:	-40 to 80°C (-40 to 176°F)
Pressure Rating:	≤ 5 Bar (72.5 psi)
Mounting:	1.5" - 3" NPT with rod antenna 3" NPT with horn antenna

Catalogue Number Ordering		
Supply Voltage:	16-30 VDC Loop-Powered (2-wire) 12-30 VDC Power (3-wire)	200 300
Maximum Range:	17 ft (5.2 m) 33 ft (10.1 m) 50 ft (15.2 m) 100 ft (30.5 m) 140 ft (42.7 m) 240 ft (73.2 m)	017 033 050 100 140 240
Frequency:	5.8 GHz 6.3 GHz	R5 R6
Communication:	HART RS232 RS485	CH C2 C4
Enclosure:	Aluminum SS316L	AL SS
Antenna:	Teflon Rod 10" (extendable) Teflon Rod 12" SS316L Horn 6"	ATE ATL HR6
Approvals:	Explosion Proof (CID1)	EXP

Dimensions



Model:	ABM	- - -	-	- - -	- -	- -	-	- -	- - -	EXP
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Non-Contact Radar Level Sensors for Interface Detection Applications | R-ID



The R-ID pulse radar level sensor is the ideal solution for oil-water interface detection applications in challenging environments.

Features

- Custom firmware enables detection of oil-water interface and top of oil
- Explosion proof - Class I, Division 1 (CID1) approvals
- Non-contact continuous level measurements
- Maintenance-free operation with build-up resistant Teflon rod antenna
- Plug-and-play installation with simple calibration
- 3-wire operation with 4-20 mA / 20-4 mA output standard
- Optional RS232 or RS485 communications with free calibration, diagnostics and data logging software
- PLC compatible (Modbus RTU)
- Aluminum and SS316L housing options to withstand any environment
- Ingress protection IP68 rating (NEMA 6)



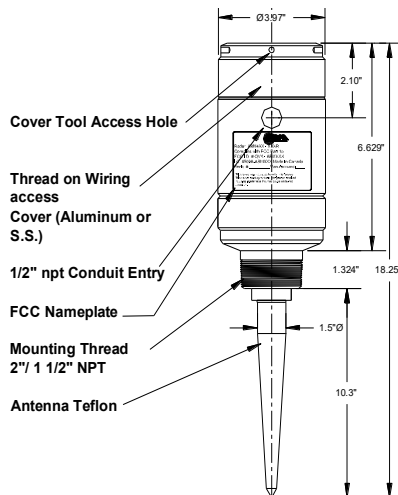
Applications

Oil-Water Interface level measurement for: Oil, Gas, Petrochemical, Refinery, and more.

Technical Data	
Measuring Range:	Up to 240 ft (73.2 m)
Temperature:	-40 to 80°C (-40 to 176°F)
Pressure Rating:	≤ 5 Bar (72.5 psi)
Mounting:	1.5" - 3" NPT

Catalogue Number Ordering		
Supply Voltage:	12-30 VDC Power (3-wire)	300
Maximum Range:	17 ft (5.2 m)	017
	33 ft (10.1 m)	033
	50 ft (15.2 m)	050
	100 ft (30.5 m)	100
	140 ft (42.7 m)	140
Frequency:	5.8 GHz	R5
	6.3 GHz	R6
Communication:	RS232	C2
	RS485	C4
Enclosure:	Aluminum	AL
	SS316L	SS
Antenna:	Teflon Rod 10" (extendable)	ATE
	Teflon Rod 12"	ATL
Approvals:	Explosion Proof (CID1)	EXP

Dimensions



Model:	ABM	300	-	- - -	- -	- -	-	- -	- - - -	EXP
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Non-Contact Radar Level Sensors for Sanitary / Hygienic Applications | R-SAN



The R-SAN pulse radar level sensor is the ideal solution for hygienic liquid, slurry or solid level applications with vapours, gases, foaming or volatile surfaces.

Features

- Food Grade Teflon antenna with 2" tri-clamp mounting
- Withstands clean-in-place (CIP) processes up to 204°C (400°F)
- Maintenance-free, non-contact continuous level measurements
- Build-up resistant Teflon rod antenna easily sheds condensation
- Plug-and-play installation with simple calibration
- 2-wire loop-powered, 3-wire or 4-wire operation with 4-20 mA / 20-4 mA output standard
- Optional HART, RS232 or RS485 communications with free calibration, diagnostics and data logging software
- PLC compatible (Modbus RTU)
- Aluminum and SS316L housing options to withstand any environment
- Ingress protection IP68 rating (NEMA 6)



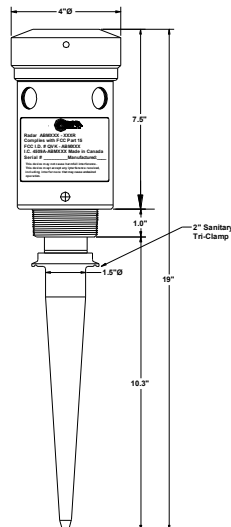
Applications

Liquid and solid level measurement for: Water, Food, Beverage and Pharmaceutical.

Technical Data	
Measuring Range:	Up to 100 ft (30.5 m)
Temperature:	-40 to 204°C (-40 to 400°F)
Pressure Rating:	≤ 2 Bar (29 psi)
Mounting:	2" tri-clamp

Catalogue Number Ordering		
Supply Voltage:	16-30 VDC Loop-Powered (2-wire) 12-30 VDC Power (3-wire) 115 VAC Power (4-wire) 230 VAC Power (4-wire)	200 300 400 430
Maximum Range:	17 ft (5.2 m) 33 ft (10.1 m) 50 ft (15.2 m) 100 ft (30.5 m)	017 033 050 100
Frequency:	5.8 GHz 6.3 GHz	R5 R6
Communication:	HART RS232 RS485	CH C2 C4
Enclosure:	Aluminum SS316L	AL SS
Antenna:	Sanitary Teflon Rod	S20
Process Connection:	2" Tri-Clamp	C20

Dimensions



Model:	ABM	-	-	-	-	-	-	-	S20C20
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Non-Contact Radar Level Sensors for High Temperature Applications | R-HT



The R-HT pulse radar level sensor is the ideal solution for liquid, slurry or solid level applications with vapours, gases, foaming or volatile surfaces in high temperature processes.

Features

- Teflon decoupler to handle process temperatures up to 177°C (350°F)
- Non-contact continuous level measurements
- Maintenance-free operation with build-up resistant Teflon rod antenna
- Plug-and-play installation with simple calibration
- 2-wire loop-powered, 3-wire or 4-wire operation
- 4-20 mA / 20-4 mA output standard
- Optional HART, RS232 or RS485 communications with free calibration, diagnostics and data logging software
- PLC compatible (Modbus RTU)
- Aluminum and SS316L housing options to withstand any environment
- Ingress protection IP68 rating (NEMA 6)



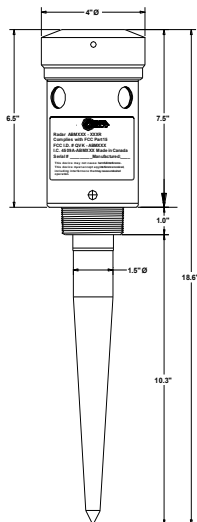
Applications

Liquid and solid level measurement for: Chemical, Petrochemical, Asphalt, Molten Metal and more.

Technical Data	
Measuring Range:	Up to 100 ft (30.5 m)
Temperature:	-40 to 177°C (-40 to 350°F)
Pressure Rating:	≤ 2 Bar (29 psi)
Mounting:	2" or 3" NPT

Catalogue Number Ordering		
Supply Voltage:	12-30 VDC Power (3-wire) 115 VAC Power (4-wire) 230 VAC Power (4-wire)	200 300 400 430
Maximum Range:	17 ft (5.2 m) 33 ft (10.1 m) 50 ft (15.2 m) 100 ft (30.5 m)	017 033 050 100
Frequency:	5.8 GHz 6.3 GHz 6.3 / 26 GHz	R5 R6 R6R2
Communication:	HART RS232 RS485	CH C2 C4
Enclosure:	Aluminum SS316L	AL SS
Antenna:	Teflon Rod 10" (extendable) Teflon Rod 12"	ATE ATL
Process Connection:	Teflon Decoupler 2" NPT Teflon Decoupler 3" NPT	H20 H30

Dimensions



Model:	ABM	- - -	-	- - -	- -	- -	-	- -	- - -	- - -
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Non-Contact Radar Level Sensors for Very High Temperature Applications | R-VHT



The R-VHT pulse radar level sensor is the ideal solution for liquid, slurry or solid level applications with vapours, gases, foaming or volatile surfaces in very high temperature processes.

Features

- Three thermal barriers to withstand temperatures up to 300°C (572°F)
- SS316L horn antenna with 8" bottom flange and thermal gasket
- Maintenance-free, non-contact continuous level measurements
- Plug-and-play installation with simple calibration
- 3-wire or 4-wire operation
- 4-20 mA / 20-4 mA output standard
- Optional RS232 or RS485 communications with free calibration, diagnostics and data logging software
- PLC compatible (Modbus RTU)
- Aluminum and SS316L housing options to withstand any environment
- Ingress protection IP68 rating (NEMA 6)



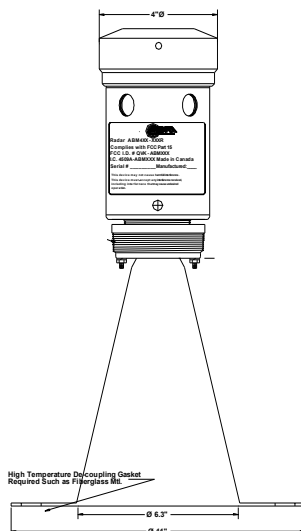
Applications

Liquid and solid level measurement for: Chemical, Petrochemical, Asphalt, Molten Metal and more.

Technical Data	
Measuring Range:	Up to 100 ft (30.5 m)
Temperature:	-40 to 300°C (-40 to 572°F)
Pressure Rating:	≤ 2 Bar (29 psi)
Mounting:	8" flange

Catalogue Number Ordering		
Supply Voltage:	12-30 VDC Power (3-wire) 115 VAC Power (4-wire) 230 VAC Power (4-wire)	300 400 430
Maximum Range:	17 ft (5.2 m) 33 ft (10.1 m) 50 ft (15.2 m) 100 ft (30.5 m)	017 033 050 100
Frequency:	5.8 GHz 6.3 GHz 6.3 / 26 GHz	R5 R6 R6R2
Communication:	RS232 RS485	C2 C4
Enclosure:	Aluminum SS316L	AL SS
Antenna:	SS316L Horn 6"	HR6
Process Connection:	Flange 8" w/ Thermal Gasket	BF8

Dimensions



Model:	ABM	- - -	-	- - -	- -	- -	-	- -	HR6	BF8
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Non-Contact Radar Level Sensors for High Pressure Applications | R-HPR



The R-HPR pulse radar level sensor is the ideal solution for liquid, slurry or solid level applications with vapours, gases, foaming or volatile surfaces in high pressure processes.

Features

- Withstands process pressure up to 70 bar (1015 psi)
- Non-contact continuous level measurements
- Maintenance-free operation with build-up resistant Teflon antenna
- Plug-and-play installation with simple calibration
- 3-wire or 4-wire operation
- 4-20 mA / 20-4 mA output standard
- Optional RS232 or RS485 communications with free calibration, diagnostics and data logging software
- PLC compatible (Modbus RTU)
- Aluminum and SS316L housing options to withstand any environment
- Ingress protection IP68 rating (NEMA 6)



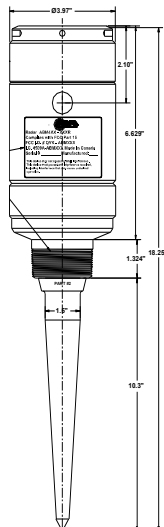
Applications

Liquid and solid level measurement for: Chemical, Food, Beverage and more.

Technical Data	
Measuring Range:	Up to 100 ft (30.5 m)
Temperature:	-40 to 177°C (-40 to 350°F)
Pressure Rating:	≤ 70 Bar (1015 psi)
Mounting:	2" NPT

Catalogue Number Ordering		
Supply Voltage:	12-30 VDC Power (3-wire) 115 VAC Power (4-wire) 230 VAC Power (4-wire)	300 400 430
Maximum Range:	17 ft (5.2 m) 33 ft (10.1 m) 50 ft (15.2 m) 100 ft (30.5 m)	017 033 050 100
Frequency:	5.8 GHz 6.3 GHz	R5 R6
Communication:	RS232 RS485	C2 C4
Enclosure:	Aluminum SS316L	AL SS
Antenna:	High Pressure Teflon Rod	ATP

Dimensions



Model:	ABM	-	-	-	-	-	-	-	-	ATP
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Non-Contact Radar Level Sensors (Continuous Power) for Remote Monitoring | R-RM



The R-RM pulse radar level sensor is the ideal solution for remote level applications in challenging environments with vapours, gases, foaming, ice or volatile surfaces.

Features

- Built-in cellular modem for remote communication and monitoring
- Maintenance-free, non-contact continuous level measurements
- Build-up resistant Teflon rod antenna or SS316L horn antenna options
- Plug-and-play installation with simple remote setup
- 3-wire operation with 4-20 mA / 20-4 mA output standard
- Sensor Access Website for measurement history, calibration and diagnostics
- 24/7 remote active control support from ABM engineers
- Side mount or detached magnetic mount cellular antenna options
- Aluminum and SS316L housing options to withstand any environment
- Ingress protection IP68 rating (NEMA 6)



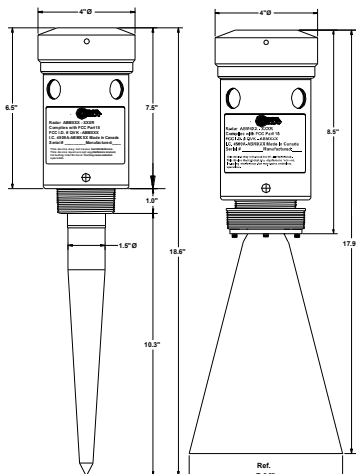
Applications

Level measurement for: Water, Wastewater, Petrochemical, Environmental and more.

Technical Data	
Measuring Range:	Up to 340 ft (103.6 m)
Temperature:	-40 to 80°C (-40 to 176°F)
Pressure Rating:	≤ 5 Bar (72.5 psi)
Mounting:	1.5" or 2" NPT with rod antenna 3" NPT with horn antenna

Catalogue Number Ordering		
Supply Voltage:	12-30 VDC Power (3-wire)	300
Maximum Range:	17 ft (5.2 m)	017
	33 ft (10.1 m)	033
	50 ft (15.2 m)	050
	100 ft (30.5 m)	100
	140 ft (42.7 m)	140
Frequency:	240 ft (73.2 m)	240
	340 ft (103.6 m)	340
	5.8 GHz	R5
Communication:	6.3 GHz	R6
	6.3 / 26 GHz	R6R2
Enclosure:	Cellular Modem	CM
Antenna:	Aluminum	AL
	SS316L	SS
Antenna:	Teflon Rod 10" (extendable)	ATE
	Teflon Rod 12"	ATL
	SS316L Horn 6"	HR6

Dimensions



Model:	ABM	300	-	--	--	CM	-	--	---
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Non-Contact Radar Level Sensors (Battery or Solar Panel) for Wireless Remote Monitoring | R-RMB



The low-power R-RMB pulse radar level sensor is the ideal solution for remote level applications in challenging environments with vapours, gases, foaming, ice or volatile surfaces.

Features

- Built-in cellular modem for remote communication and monitoring
- Battery or solar panel power operation
- Internal or external battery pack options
- Maintenance-free, non-contact level measurements
- Build-up resistant Teflon rod antenna or SS316L horn antenna options
- Plug-and-play installation with simple remote setup
- Sensor Access Website for measurement history, calibration and diagnostics
- 24/7 remote active control support from ABM engineers
- Side mount or magnetic mount cellular antenna options
- Aluminum and SS316L housing options to withstand any environment
- Ingress protection IP68 rating (NEMA 6)



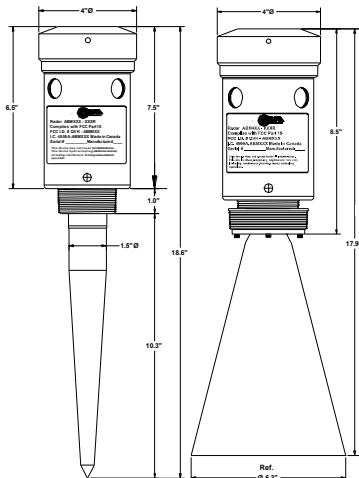
Applications

Level measurement for: Water, Wastewater, Petrochemical, Environmental and more.

Technical Data	
Measuring Range:	Up to 340 ft (103.6 m)
Temperature:	-40 to 80°C (-40 to 176°F)
Pressure Rating:	≤ 5 Bar (72.5 psi)
Mounting:	1.5" or 2" NPT with rod antenna 3" NPT with horn antenna

Catalogue Number Ordering		
Supply Voltage:	12-30 VDC Power (Battery)	100
Maximum Range:	17 ft (5.2 m)	017
	33 ft (10.1 m)	033
	50 ft (15.2 m)	050
	100 ft (30.5 m)	100
	140 ft (42.7 m)	140
	240 ft (73.2 m)	240
Frequency:	340 ft (103.6 m)	340
	5.8 GHz	R5
	6.3 GHz	R6
	6.3 / 26 GHz	R6R2
Communication:	Cellular Modem	CM
Enclosure:	Aluminum	AL
	SS316L	SS
Antenna:	Teflon Rod 10" (extendable)	ATE
	Teflon Rod 12"	ATL
	SS316L Horn 6"	HR6
Battery Pack:	Internal 11AA Holder	AA
	External 8D Enclosure	8D
	External 18D Enclosure	18D

Dimensions



Model:	ABM	100	-	---	--	CM	-	--	---	---
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Non-Contact Radar Level Sensors for Flood Monitoring Applications | R-FM



The R-FM dual frequency pulse radar level sensor is the ideal solution for liquid level flood monitoring applications with temperature variations, extreme temperatures, rain or wind.

Features

- Low-power consumption ideal for solar panels
- Maintenance-free, non-contact continuous level measurements
- Dual frequency radar with SS316L horn antenna
- Plug-and-play installation with simple calibration
- 2-wire loop-powered or 3-wire operation
- 4-20 mA / 20-4 mA output standard
- Optional HART, RS232 or RS485 communications with free calibration, diagnostics and data logging software
- PLC compatible (Modbus RTU)
- Aluminum and SS316L housing options to withstand any environment
- Ingress protection IP68 rating (NEMA 6)



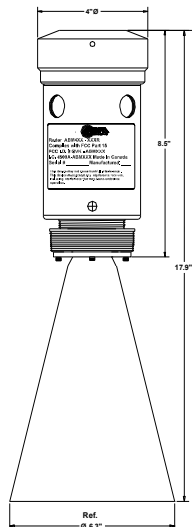
Applications

Liquid level measurement for: Environmental, Water, Wastewater and more.

Technical Data	
Measuring Range:	Up to 340 ft (103.6 m)
Temperature:	-40 to 80°C (-40 to 176°F)
Pressure Rating:	≤ 5 Bar (72.5 psi)
Mounting:	3" NPT

Catalogue Number Ordering		
Supply Voltage:	16-30 VDC Loop-Powered (2-wire) 12-30 VDC Power (3-wire)	200 300
Maximum Range:	17 ft (5.2 m) 33 ft (10.1 m) 50 ft (15.2 m) 100 ft (30.5 m) 140 ft (42.7 m) 240 ft (73.2 m) 340 ft (103.6 m)	017 033 050 100 140 240 340
Frequency:	6.3 / 26 GHz	R6R2
Communication:	HART RS232 RS485	CH C2 C4
Enclosure:	Aluminum SS316L	AL SS
Antenna:	SS316L Horn 6"	HR6

Dimensions



Model:	ABM	-	-	-	-	-	-	-	-	-	Solar Panel
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Non-Contact Radar Level Sensors for Fast Response Marine Applications | R-FR



The R-FR pulse radar level sensor is the ideal solution for liquid level applications that require fast response in challenging marine environments.

Features

- Fast response 10-30 echoes per second
- Maintenance-free, non-contact continuous level measurements
- Corrosion-resistant SS316L enclosure and horn antenna for marine environments
- Plug-and-play installation with simple calibration
- 3-wire operation
- 4-20 mA / 20-4 mA output standard
- Optional RS232 or RS485 communications with free calibration, diagnostics and data logging software
- PLC compatible (Modbus RTU)
- Ingress protection IP68 rating (NEMA 6)



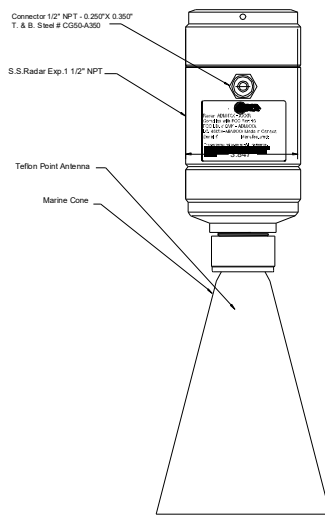
Applications

Level measurement for: Marine, Environmental, Water, Wastewater and more.

Technical Data	
Measuring Range:	Up to 340 ft (103.6 m)
Temperature:	-40 to 80°C (-40 to 176°F)
Pressure Rating:	≤ 5 Bar (72.5 psi)
Mounting:	3" NPT

Catalogue Number Ordering		
Supply Voltage:	12-30 VDC Power (3-wire)	300
Maximum Range:	17 ft (5.2 m) 33 ft (10.1 m) 50 ft (15.2 m) 100 ft (30.5 m) 140 ft (42.7 m) 240 ft (73.2 m) 340 ft (103.6 m)	017 033 050 100 140 240 340
Frequency:	5.8 GHz 6.3 GHz	R5 R6
Communication:	RS232 RS485	C2 C4
Enclosure:	SS316L	SS
Antenna:	SS316L Horn 6"	HR6

Dimensions



Model:	ABM	300	-	- - -	- -	- -	-	SS	HR6
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Non-Contact Radar Level Sensors for Anti-Collision Applications | R-AC



The R-AC radar system is the ideal solution for anti-collision applications with cranes, vehicles or other machinery.

Features

- Two radar sensors operating at different frequencies
- Very fast response (up to 20 updates per second)
- Maintenance-free, non-contact continuous level measurements
- Plug-and-play installation with simple calibration
- 3-wire operation with 4-20 mA / 20-4 mA output standard
- RS485 communications with free calibration, diagnostics and data logging software
- PLC compatible (Modbus RTU)
- Aluminum and SS316L housing options to withstand any environment
- Ingress protection IP68 rating (NEMA 6)



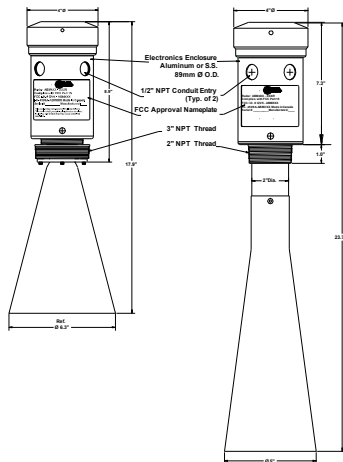
Applications

Distance measurement for: Construction, Steel, Power Generation, Shipping, and Mining.

Technical Data	
Measuring Range:	Up to 240 ft (73.2 m)
Temperature:	-40 to 80°C (-40 to 176°F)
Pressure Rating:	≤ 5 Bar (72.5 psi)
Mounting:	3" NPT and 2" NPT

Catalogue Number Ordering		
Supply Voltage:	12-30 VDC Power (3-wire)	300
Maximum Range:	17 ft (5.2 m)	017
	33 ft (10.1 m)	033
	50 ft (15.2 m)	050
	100 ft (30.5 m)	100
	140 ft (42.7 m)	140
Frequency:	6.3 GHz (Radar #1)	R6
	26 GHz (Radar #2)	R2
Communication:	RS485	C4
Enclosure:	Aluminum	AL
	SS316L	SS
Antenna:	SS316L Horn 6"	HR6
	SS316L Horn 5"	HR5

Dimensions



Model #1:	ABM	300	-	__ __	R6	C4	-	__ __	HR6	-	CRANE
Model #2:	ABM	300	-	__ __	R2	C4	-	__ __	HR5	-	CRANE