

# MICROCOR<sup>®</sup> WIRELESS TRANSMITTER

Request A Quote

## M-310 / M-320

The Microcor ER Wireless Transmitter (M-310 / M-320) is based on Cosasco's Microcor<sup>®</sup> high resolution corrosion measurement technology, the industry's most widely used and only technology capable of operating in any process environment. The M-310 / M-320 uses high resolution metal loss measurement providing 18 bit resolution, Measures Corrosion and Erosion rate, and is rated for operation in hazardous locations (Class I, Zone 1). The allowable operating range of from -40°C to 70°C is proven every day by existing systems reliably working in the harsh environments of the frigid arctic and deserts of the Middle East.

The M-310 / M-320 power module has a typical life of 3 years and is hazardous location certified to allow change out in the hazardous area. Typical wireless range is 1000 ft. (300 m) or 1500 ft (450 m) in optimal conditions with a clear line of sight from transmitter to transmitter or transmitter to gateway/management station, with multiple "hops" permissible from any transmitter back to its gateway/management station.

Other wireless communication options may be permissible. For details, contact Cosasco.

The M-310 / M-320 is available with the option of WirelessHART™ 7 or ISA100 Wireless communications protocol for seamless integration with Emerson, Yokogawa, and numerous other wireless process systems. For outline of a Cosasco Wireless System, and details of each product, see Cosasco Wireless System ISA100 and Cosasco Wireless System WirelessHART7 data sheets.



Specification	Communication Option	
	WirelessHART 7	ISA100 Wireless
<b>Wireless Range (clear line of sight)</b>	1000 ft (300 m)	1500 ft (450 m)
<b>Transmitter Battery Life</b>	3 Years	3 Years
<b>Wireless Devices Supported</b>	Up to 100	Up to 500
<b>Network Type</b>	Inherently Mesh	Mesh or Star Topology
<b>System Integration</b>	Emerson, Endress & Hauser, Siemens, and ABB Wireless Networks	Yokogawa, and other ISA100 Wireless Networks
<b>Certifications</b>	Hazardous Area Locations (Class I, Zone 1)	Hazardous Area Locations (Class I, Zone 1)



# M-310 / M-320

## ATEX Certification

Ex d [ib] Class I, Zone 1, IIC, T4, Ta = -40C to +70C

## North American Certifications

FM AEx d [ib] Class I, Zone 1, IIC, T4, Ta = -40C to +70C

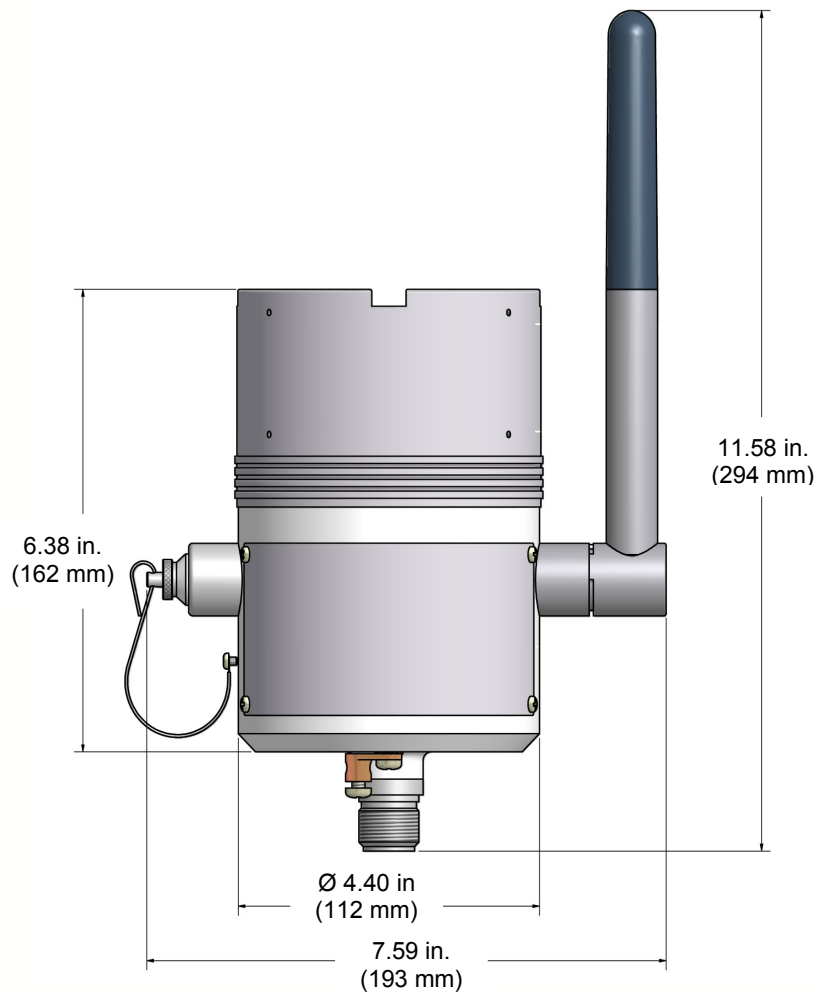
FMc Ex d [ib] Class I, Zone 1, IIC, T4, Ta = -40C to +70C

## IEC Ex Certification

IEC Ex d [ib], Class I, Zone 1, IIC, T4, Ta = -40C to +70C

All certifications based on IP66 Enclosure and for use only with Power Module P/N 748400

## Dimensions



## Ordering Information for ISA100 Wireless



### Microcor ER Wireless Transmitter-ISA100 Wireless

Model	Description	
MWT-3905	Microcor ER Wireless Transmitter with ISA100 Radio	
	<b>Code</b>	<b>Housing</b>
	0	Aluminum
	1	Stainless Steel 316 SS
		<b>Code</b>   <b>Radio</b>
		2   2.4 GHz ISA100 Wireless - Integral Antenna
MWT-3905	— 0 —	2 ←

Typical Order Number

## System Requirements

### Field Wireless Management Station

See R-Y410 Field Wireless Management Station Data Sheet.

### Field Wireless Access Point

See R-Y510 Field Wireless Access Point Data Sheet.

### Microcor® ER Probes

See Microcor® ER Probes Data Sheet, Bulletin No. 150 for ordering information.

### Probe Adapters

Model M2000 & M3000 series probes

P/N 745092

Model M4000 & S4000 series probes

P/N 745093 (For permanent connection at 2500 PSI max)  
 P/N 745093H (For permanent connection at 2500 PSI max)

P/N 745114 (For permanent connection at 10,000 PSI max when used with pressure retaining covers P/N 740095)  
 P/N 745114H (For permanent connection at 10,000 PSI max when used with pressure retaining covers P/N 740095)

## Cables (Transmitter to Probe Cable with Transmitter Mounting Bracket)

Part No.	Description	
748497	M-320 Remote Mounting Kit	
	<b>Code</b>	<b>Cable Type</b>
	0 <sup>2</sup>	Cable Assembly Only (Requires Probes Adapter)
	1	Retractable (unarmored)
	2	Retractable (armored)
	3	Retrievable (armored) 2500 PSI
	4	Retrievable (unarmored) 2500 PSI
	5	Retrievable (armored) 10,000 PSI
	6	Retrievable (unarmored) 10,000 PSI
		<b>Code</b>   <b>Cable Length</b>
		L   Length in Feet (15 ft max)
748497	— 1 —	5 ←

Typical Order Number

## Accessories

### Cosasco Wireless Extender

Model	Description	
MWT-3905-WE	Cosasco Wireless Extender (includes mounting bracket)	
	<b>Code</b>	<b>Radio</b>
	0	Aluminum
	1	Stainless Steel 316 SS
		<b>Code</b>   <b>Housing</b>
		2   2.4 GHz ISA100 Wireless - Integral Antenna
MWT-3905-WE	— 0 —	0 ← Typical Order Number

7.2 V Lithium Power Module P/N 748400

M-320 Installation Kit -  
ISA100 Wireless

P/N 702406-MWT-ISA (includes Wireless Field Tool for transmitter configuration)

## Ordering Information for WirelessHART 7

### Microcor ER Wireless Transmitter-WirelessHART7

Model	Description	
MWT-3905	<b>Code</b>	<b>Housing</b>
	0	Aluminum
	1	Stainless Steel 316 SS
		<b>Code</b>   <b>Radio</b>
		0   2.4 GHz Wireless HART7 - Integral Antenna
MWT-3905	— 0 —	0 ← Typical Order Number

## System Requirements

### Wireless Gateways

See R-1420 or R-1410 Data Sheets.

### Checkmate DL-W Wireless Configurator

P/N Checkmate DL-W

### Microcor® ER Probes

See Microcor® ER Probes Data Sheet, Bulletin No. 150 for ordering information.

### Microcor® Erosion Probes

See Microcor Erosion Probes Data Sheet, Bulletin No. 700 for ordering information.

### Probe Adapters

Model M2000 & M3000 series probes

P/N 745092

Model M4000 & S4000 series probes

P/N 745093 (For permanent connection at 2500 PSI max)

P/N 745093H (For permanent connection at 2500 PSI max)

P/N 745114 (For permanent connection at 10,000 PSI max  
when used with pressure retaining covers P/N 740095)

P/N 74114H (For permanent connection at 10,000 PSI max  
when used with pressure retaining covers P/N 740095)

## Cables (Transmitter to Probe Cable with Transmitter Mounting Bracket)

Part No.	Description	
748497	M-310 Remote Mounting Kit	
	<b>Code</b>	<b>Cable Type</b>
	1	Retractable (unarmored)
	2	Retractable (armored)
	3	Retrievable (armored) 2500 PSI
	4	Retrievable (unarmored) 2500 PSI
	5	Retrievable (armored) 10,000 PSI
	6	Retrievable (unarmored) 10,000 PSI
		<b>Code</b> <b>Cable Length</b>
	L	Length in Feet (15 ft. max)
748497	— 1 — 5	← Typical Order Number

## Accessories

### Cosasco Wireless Extender

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		<b>Code</b> <b>Housing</b>
	0	2.4 GHz Wireless HART7 - Integral Antenna
MWT-3905-WE	— 0 — 0	← Typical Order Number

7.2 V Lithium Power Module P/N 748400

M-310 Installation Kit -  
WirelessHART7

P/N 702406-MWT

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