

# 3M™ Electronic Marker System (EMS) Full-Range Markers

The 3M™ Full-Range Marker provides an accurate, convenient, long-lasting method of marking underground facilities. Electronic marking saves time and money spent searching for buried facilities prior to excavation. The marker also acts as a digging shield over buried facilities, lessening the chances of damage. And, unlike surface markers such as stakes, flags or paint, the full-range marker cannot be inadvertently moved or worn away by weather.

The addition of the new 3M-iD markers provides additional functionality by enabling facility data to be stored in the marker. The pre-programmed unique serial number integrates with back office mapping and GIS systems when used for mapping new and legacy assets and points of special interest for construction and maintenance applications.

The full-range marker is buried over key facilities during construction or maintenance. Later, the marker is easily and accurately located using a 3M™ Dynatel™ Locator. The locator transmits a signal to the buried marker. The marker returns the signal to the locator, indicating the marker's exact position, while the locator provides both a visual reading and an audible tone.














3M™ Electronic Marker System(EMS)  
XR/iD Full-Range Markers

Features	Benefits
Accurate even in congested areas	Helps eliminate mislocates
Underground marker	Protected from damage from above-ground environment
Doubles as a digging shield	Eliminates costly dig ins
Easy to Use	Minimal training
RFiD capability	Positive identification using facility information
Physical Specifications	
Size	15" diameter x 0.65" thick (38.10 cm x 1.65 cm)
Weight	Net: 1 lb. (0.45 kg) each/ Shipping: 27 lbs. (12.24 kg)/carton
Packaging	25 markers per carton
3M iD Markers Read Range	With a 'U' model (U.S.) locator: 9 ft. (2.7 m) With a 'E' model (Export, CE) locator: 2 m
3M Passive Markers Detection Range	8 ft (2.4 m)
Environmental Specifications	
Operating Temperature	-4°F to 122°F (-20°C to 50°C)
Storage Temperature	-40°F to 158°F (-40°C to 70°C)



# 3M™ Full Range Markers

Image	Product	Application	Stock Number
	3M™ iD Full-Range Marker 1248-XR/iD	General purpose and reclaimed water	80611321284
	3M™ EMS Full-Range Marker 1250	Telecommunications industry	80610221017
	3M™ iD Full-Range Marker 1250-XR/iD	Telecommunications industry	80611321235
	3M™ EMS Full-Range Marker 1251	Power industry	80610221295
	3M™ iD Full-Range Marker 1251-XR/iD	Power industry	80611321243
	3M™ EMS Full-Range Marker 1252	Water industry	80610221519
	3M™ iD Full-Range Marker 1252-XR/iD	Water industry	80611321250
	3M™ EMS Full-Range Marker 1253	Wastewater industry	80610221501
	3M™ EMS Full-Range Marker 1253-XR/iD	Wastewater industry	80611321268
	3M™ EMS Full-Range Marker 1254	Gas industry	80610221550
	3M™ iD Full-Range Marker 1254-XR/iD	Gas industry	80611321276

## Important Notice

All statements, technical information, and recommendations related to 3M's products are based on information believed to be reliable, but the accuracy or completeness is not guaranteed. Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use. Any statements related to the products which are not contained in 3M's current publications, or any contrary statements contained on your purchase order shall have no force or effect unless expressly agreed upon, in writing, by an authorized officer of 3M.

### Conditional Limited Warranty

3M provides the following Conditional Limited Warranty for its iD Electronic Marker Products: When installed in accordance with 3M's installation instructions, 3M warrants iD Electronic Markers for a period of ten (10) years from the date of purchase of the product, to be free from defects in material and manufacture, provided iD Electronic Markers are located with 3M™ Dynatel™ Locators or other brand locators as may be designated by 3M in writing. This warranty does not extend to iD Electronic Markers that have been subjected to misuse or improper application or that have been repaired or altered by others. **3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE.** If the iD Marker is found to be defective within the warranty period, your exclusive remedy shall be, at 3M's options, to repair or replace the iD Markers or refund the purchase price. **Except where prohibited by law, 3M will not be liable for any indirect, special, incidental or consequential loss or damage arising from this 3M product, regardless of the legal theory asserted.**

### Conditional Lifetime Warranty

3M provides the following Conditional Limited Warranty for its Electronic Marker Products (non-iD versions only): When installed in accordance with 3M's installation instructions, 3M warrants Electronic Markers for the lifetime of the product, to be free from defects in material and manufacture, provided the Electronic Markers are located with 3M™ Dynatel™ Locators or other brand locators as may be designated by 3M in writing. This warranty does not extend to Electronic Markers that have been subjected to misuse or improper application or that have been repaired or altered by others. **3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE.** If the Electronic Marker is found to be defective during the normal lifetime of the product, your exclusive remedy shall be, at 3M's options, to repair or replace the Electronic Markers or refund the purchase price. **Except where prohibited by law, 3M will not be liable for any indirect, special, incidental or consequential loss or damage arising from this 3M product, regardless of the legal theory asserted.**



## Track and Trace Solutions

6801 River Place Blvd.  
Austin, TX 78726-9000  
800/426 8688  
Fax 800/626 0329  
www.3M.com/dynatel

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75-4700-2777-4