



CABLE JOINTS, CABLE TERMINATIONS, CABLE GLANDS, CABLE CLEATS  
FEEDER PILLARS, FUSE LINKS, ARC FLASH, CABLE ROLLERS, CUT-OUTS

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# Dynatel™

## 1420-iD Electronic Marker System Marker Locators

## 1420E-iD Electronic Marker System Marker Locators



**Advanced features detect more information about underground utilities.**

A new feature exclusive to the 3M Dynatel EMS iD Marker Locators is the ability to read, write and lock programmed information into the new 3M 1400 Series

EMS iD Ball Markers. Information such as a pre-programmed unique identification number, facility data, owner information, application type, placement date and other details from up to 100 ID markers can all be read, stored with date/time stamp and transmitted back to your PC through a standard RS232 serial port for enhanced resource management.

Accurate even in congested areas.

### 3M Dynatel EMS iD

Marker Locators are unaffected by metal conduit or pipe, metallic conductors, fences, AC power or electronic markers for other utilities. Multiple ID markers located at close proximity can be read individually using the new system.

### A simple, easy-to-use system.

Lightweight and compact, the 3M Dynatel EMS iD Marker Locators are rugged, ergonomic and require very little operator training. A large backlit digital liquid crystal display (LCD) screen and soft-key operation make them easy to understand and use for more precise locates. A "memory" feature remembers operator set-up from previous use. A standard RS232 communications port allows interfacing to an external computer for uploading/downloading of data, unit configuration and remote software upgrades. The system can run over 25 hours on eight AA alkaline batteries.

### New-to-the-world technology for locating underground utilities without any doubt.

3M™ Dynatel™ 1420/1420E-iD Electronic Marker System (EMS) Marker Locators are microprocessor-based systems that incorporate advanced digital signal processing techniques to quickly and efficiently locate underground facilities – even years after construction or maintenance.

Designed to be more accurate, faster and more integrated than ever before, the 3M Dynatel EMS iD Marker Locators allow you to accurately and easily:

- Locate, read and write to ID markers
- Pin-point the exact depth and location of all existing models of properly installed underground passive EMS markers
- Direct depth reading of ID markers
- Locate two different marker frequencies simultaneously



### Features

- Large backlit, high resolution graphic display
- PC interface via standard RS232 serial port
- User-configurable features and interface
- Detects all seven EMS marker frequencies
- Marker-Link and Locator PC tools software
- ID marker read/write capability
- Dual marker frequency search-simultaneous
- Marker depth estimation

## Physical Specifications:

	<b>SIZE</b> H x W x D IN. (CM)	<b>WEIGHT</b> (INCLUDING BATTERIES)
<b>Receiver</b>	10.25 x 4.7 x 30 (26.7 x 11.8 x 76.2)	4 lb. (1.9 kg)
<b>Shipping</b>	N/A	11.5 lb. (5.3 kg)

## Environmental Specifications:

Operating temperature	-4° to 122°F (-20° to 50°C)
Storage temperature	-4° to 158°F (-40° to 70°C)
Regulatory	CE
Standard	IP54

## Electrical Specifications:

Marker compatibility	All 3M markers (telephone, gas, CATV, power, water, wastewater and general purpose)
Dual marker mode	Any two marker frequencies simultaneously
Detection range	Exceeds maximum marker depth specifications
Marker read range	5 ft. (1.5 m) to all ID ball markers 4 ft. (1.2 m) to water and power markers on 1420E version only
Marker write range	1 ft. (30 cm)
Marker depth measurement accuracy	+/- 10% +/- 2 in. (5 cm) up to marker depth specifications
Display type	Backlit graphic liquid crystal display (LCD) screen
Memory storage with date/ time stamp	Read marker records 100 Written marker records 100 User defined ID templates 32
Marker depth memory storage	Five with date/time stamp
Power	Battery type: eight AA size, alkaline Typical battery life: 25 hours
Display	Large graphic high-contrast LCD with backlight
Speaker	0.25 W
Headphone jack	Standard mini-jack
Serial port	Standard RS232 serial with DB9 connector

## Ordering information

## Ref.-No.

EMS-iD Marker Locator with iD Read/Write  
EMS-iD Marker Locator with iD Read/Write (OUS)

1420  
1420E

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