

3M™ Dynatel™ EMS Marker/Tape Locator 7420/7420E Product Specifications

Physical Specifications:

| | | |
|--------------|-------------------------------------------------------------------------------------------|-------------------------------------------------|
| Locator | Size (H x W x D) IN (CM) 30" x 6.5" x 10.5" (76 x 17 x 27) Size (L x W x H) IN (CM) | Weight (including batteries) 5 lb. (2.25 kg) |
| Shipping Box | 33" x 17" x 12.5" (84 x 43 x 32) | 7 lb. (3.2 kg) |

Environmental Specifications:

| | |
|------------------------|-----------------------------------|
| Operating temperature | -4° F to 122° F (-20° C to 50° C) |
| Storage temperature | -4° F to 158° F (-20° C to 70° C) |
| Regulatory | 7420 (FCC Part 15), 7420E (CE) |
| Environmental Standard | IP54 |

Compatibility:

| | |
|---------------------------------|----------------------------------------------------------------------------------------------|
| 3M EMS/ID Markers | All 3M markers (telephone, gas, communication, power, water, wastewater and general purpose) |
| 3M EMS 7600 Series Caution Tape | All 3M path marking caution tape (telephone, gas, wastewater) |

Range/Depth:

Write Range 3M ID Markers:

| | |
|--------------|----------------|
| Near-Surface | 6 in. (15 cm) |
| Ball Marker | 12 in. (30 cm) |
| Full-Range | 24 in. (61 cm) |

7420 Read Range 3M ID Markers:

| | |
|--------------|-------------------------------------------------------------------------------------|
| | (Telephone, Power, Gas, Water, Wastewater, Communications (CATV), General Purpose)* |
| Near-Surface | 3 ft. (0.9 m) |
| Ball Marker | 5 ft. (1.5 m) |
| Full-Range | 8 ft. (2.4 m) |

7420E Read 3M ID Markers:

| | |
|--------------|------------------------------------------------------------------------------|
| | (Telephone, Gas, Wastewater, Water, Communications (CATV), General Purpose)* |
| Near-Surface | 90 cm (36 in.) |
| Ball Marker | 1.5 m (60 in.) |
| Full-Range | 2.4 m (94 in.) |

* Some countries do not allow all marker operating frequencies. Refer to the Operator's Manual for more information.

Detection Depth 3M Passive Markers (no ID):

| | |
|--------------|----------------|
| Near-Surface | 3 ft. (0.9 m) |
| Ball Marker | 6 ft. (1.8 m) |
| Mid-Range | 7 ft. (2.1 m) |
| Full-Range | 9 ft. (2.75 m) |

Maximum Burial Depth

| | |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| 7600 Series Caution Tape | 2.0 ft. (.61 m) |
| Depth measurement accuracy | +/- (10% + 5 cm) or +/- (10% + 2 in.) up to specified depth of marker or caution tape (Depth accuracy susceptible to high ambient noise conditions) |

ID Marker Memory Storage:

| | |
|-------------------------------------|---------------------------|
| 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 |

Electrical Specifications:

| | |
|----------------|-------------------------------------------------------------------------------|
| Power | Rechargeable battery pack (12V2R4A)* |
| Battery life: | 8 hours typical† |
| Charging time | 2.5 hours, with 90~240V AC adapter |
| Display | Large graphic high-contrast LCD with backlight |
| Speaker | 0.25 W |
| Headphone jack | Standard mini phone jack |
| Serial port | Standard RS232 serial with DB9 connector(RS232 to USB adapter cable included) |

Notes:
 *Some countries do not allow all marker operating frequencies. Refer to configuration section for 7420E instruction manual (Section 4A).
 †It's recommended to use the rechargeable battery pack. However, a battery holder is provided for using 8-AA size Alkaline batteries for backup, which would have reduced battery life.
 *The battery life is measured for the 12V2R4 rechargeable battery pack at 73°F/23°C, with 10% usage of the backlight and audio volume at medium level.