AEA Technology, Inc. specializes in hand-held, light-weight, and economical RF testing solutions. Our 140-525™ and CellMate™ EX meters feature graphical sweep and numerical data for SWR and Return Loss. The VIA™ Analyzer adds graphical sweep and numerical data for Impedance and Resistance. In addition to presenting accurate data, all our SWR Meters have non-volatile memories, backlit LCD’s, and optional PC software for data storage, upload, saving printing, and export. These instruments are rugged and “Belt Friendly” for easy transport up towers or other climbing locations. All can be operated on AA alkaline or NiMH batteries, or AC powered.

Used by the military, communications industry professionals, and amateur radio operators these instruments were designed to provide accurate information on antenna system performance. Built tough and weather resistant they are designed to go into the field or to sea and provide years of reliable performance.

### Features
- Auto scaling
- Auditory cues
- Signal generator mode
- Self-test function
- SuperTwist LCD and Backlight
- Battery saver function
- Relative field strength in 140-525 & CellMate EX
- Calculated bandwidth in VIA Analyzer
- Optional MS Window® software
- Optional belt case with strand hook and shoulder strap

### Benefits
- Simplicity in testing and tuning antennas
- Fast accurate results in a hand-held instrument
- “Belt Friendly” for transport and climbing
- Compact rugged design for years of service
- Ability to save and recall test results on the instrument
- Upload saved tests to a PC, display, print, archive, and export test results

### Part Numbers

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>140-525 Analyzer</td>
<td>5006-5001</td>
</tr>
<tr>
<td>Optional Value Bundle Special</td>
<td>5006-1500*</td>
</tr>
<tr>
<td>CellMate EX</td>
<td>6010-5000</td>
</tr>
<tr>
<td>Optional Value Bundle Special</td>
<td>5006-1500*</td>
</tr>
<tr>
<td>VIA Analyzer</td>
<td>5013-5000</td>
</tr>
<tr>
<td>Optional Value Bundle Special</td>
<td>5012-1500*</td>
</tr>
</tbody>
</table>

*Must be ordered with the instrument to take advantage of the discounted price. VBS contain: PC software, serial cable, soft belt case with strand hook and shoulder strap, and AC wall adapter. For 2-pin Schuko style plug use P/N 50xx-1550. See reverse for other optional accessories.
Both the 140-525 and CellMate EX use “Analyst Director” software.

### SWR Meters’ Comparison

<table>
<thead>
<tr>
<th>Measurements</th>
<th>140-525</th>
<th>CellMate EX</th>
<th>VIA Analyzer</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWR</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Return Loss</td>
<td>x</td>
<td>x</td>
<td>x</td>
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<tr>
<td>Impedance (Z)</td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Resistance (R)</td>
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<tr>
<td>Field Strength Function</td>
<td>x</td>
<td>x</td>
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<tr>
<td>Calculated Band width</td>
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</tbody>
</table>

### Specifications

- **Frequency Range**: 135 - 525 MHz, 600 - 999 MHz, 0.1 -54 MHz
- **Resolution**: 10 KHz, 10 KHz, 1KHz
- **Max Sweep Width**: 500 MHz, 200 MHz, 20 MHz
- **Sweep Speed**: 1.6 seconds, 1 second, 1.2 seconds
- **Impedance Range**: 2-1000 Ohms
- **Harmonic & Spurious**: >40 dB below fundamental, >40 dB below fundamental, >30 dB below fundamental
- **VSWR Plot Range**: 1:1 to 10:1, 1:1 to 10:1, 1:1 to 20:1
- **Return Loss Plot Range**: -1.7 to -30dB, -1.7 to -30dB, -1 to -40dB
- **Impedance Plotting Scales**: 0-100 Ohms, 0-250 Ohms, 0-1000 Ohms
- **Resistance Plotting Scales**: 0-100 Ohms, 0-250 Ohms, 0-1000 Ohms
- **Phase Angle**: -45º to +45º
- **Maximum Input Power**: +20 dBm, +20 dBm, +20 dBm
- **Output Power**: +5 dBm, +5 dBm, +5 dBm
- **Connector Port**: N Type, N Type, N Type
- **Non-Volatile Memory**: 15, 15, 4
- **PC Software**: optional, optional, optional
- **Applicable Software**: Analyst Director, Analyst Director, VIA Director
- **Serial Port Speed**: 9600-19.2K baud, 9600 Bps, 4800 & 9600 Bps

### Power Specifications

- **Voltage Requirement**: 10 VDC Min, 10 VDC Min, 12 VDC Min
- **Current Requirement**: 380 mA, 250 mA, 150 mA
- **Battery Types (external recharging)**: 8 AA alkaline or NiMH, 8 AA alkaline or NiMH, 8 AA alkaline or NiMH
- **Battery Life**: 8 Hrs typical, 10 Hrs typical, 16 Hrs typical

### Physical

- **LCD**: 64 x 128 backlit, 64 x 128 backlit, 64 x 128 backlit
- **Size**: 8.5” x 4.3” x 2.25” 215 x 110 x 58 mm, 8.5” x 4.3” x 2.25” 215 x 110 x 58 mm, 8.5” x 4.3” x 2.25” 215 x 110 x 58 mm
- **Weight**: 20 oz (585grams), 20 oz (585grams), 20 oz (585grams)

### Optional Accessories

- **PC Software**: Analyst Director 5005-1201, Analyst Director 5005-1201, VIA Director 5001-1201
- **Serial Cable**: 0070-1201, 0070-1201, 0070-1201
- **Soft Belt Case**: 5001-1002, 5001-1002, 5001-1002
- **AC Power Adapter 90-240VAC, 50-60Hz**: 5001-0202, 5001-0202, 5001-0202
- **Soft Equipment Case**: 6015-1002, 6015-1002, 6015-1002
- **Hard Equipment Case**: 6015-1003, 6015-1003, 6015-1003
- **DC Vehicle Adapter**: 6025-0250, 6025-0250, 6025-0250
- **NiMH Batteries & Charger Kit**: 0010-0020, 0010-0020, 0010-0020

**NOTE**: Items highlight in blue are part of Value Bundle Specials.