

## ANRITSU

# S331E

The Anritsu S331E Site Master is a rugged, handheld cable and antenna analyzer designed for field maintenance of wireless communications networks. Operating from 2 MHz to 4 GHz, it provides comprehensive sweep capabilities including Return Loss, VSWR, Cable Loss, Distance-to-Fault (DTF), Phase, and 2-port Transmission measurements. Built to handle punishing field conditions, the S331E features a daylight-viewable 8.4-inch touchscreen display, a 4-hour battery life, and supports advanced options like a high-accuracy power meter and built-in GPS.

## SPECIFICATIONS

### General

|                   |                                                      |
|-------------------|------------------------------------------------------|
| Display           | 8.4-inch TFT color touchscreen, 800 x 600 resolution |
| Standard Warranty | 3 years                                              |

### Physical

|                       |                   |
|-----------------------|-------------------|
| Operating Temperature | -10 to 55 °C      |
| Dimensions (W×H×D)    | 273 × 199 × 91 mm |
| Weight                | 2.71 kg           |

### Frequency Specifications

|                                      |                                           |
|--------------------------------------|-------------------------------------------|
| Frequency Range                      | 2 MHz to 4 GHz                            |
| Frequency Accuracy                   | ±1.5 ppm (@ 25 °C)                        |
| Frequency Resolution                 | 1 kHz                                     |
| Interference Immunity (On-Channel)   | +17 dBm @ > 1.0 MHz from carrier          |
| Interference Immunity (On-Frequency) | 0 dBm within ±10 kHz of carrier frequency |

### Measurement Capabilities

|                       |                             |
|-----------------------|-----------------------------|
| Data Points per Sweep | 137, 275, 551, 1102, 2204   |
| Sweep Time            | 1 ms / data point (typical) |

### Analyzer Performance

|                              |                                   |
|------------------------------|-----------------------------------|
| Directivity                  | > 42 dB (with O.S.L. calibration) |
| Maximum Input (Damage Level) | +25 dBm CW, 50 VDC                |

### High Accuracy Power Meter (Option)

|                           |                       |
|---------------------------|-----------------------|
| High Accuracy Power Meter | Supported (Option 19) |
|---------------------------|-----------------------|

### GPS Receiver (Option)

|              |                       |
|--------------|-----------------------|
| GPS Receiver | Supported (Option 31) |
|--------------|-----------------------|

**Interfaces and Connectors**

|                        |           |
|------------------------|-----------|
| RF Test Port Connector | Type N(f) |
| RF Test Port Impedance | 50 Ω      |

**Display and User Interface**

|              |            |
|--------------|------------|
| Display Size | 8.4 inches |
|--------------|------------|

**Data Storage and Software**

|                                    |                                                                     |
|------------------------------------|---------------------------------------------------------------------|
| Internal Memory Capacity           | > 2,000 files / traces                                              |
| PC Analysis Software Compatibility | Line Sweep Tools (LST), Master Software Tools (MST), easyTest Tools |

**Power Specifications**

|              |                      |
|--------------|----------------------|
| Battery Type | Lithium-Ion (Li-Ion) |
|--------------|----------------------|

**Environmental and Regulatory**

|                           |                  |
|---------------------------|------------------|
| Storage Temperature Range | -40 °C to +71 °C |
|---------------------------|------------------|

**Performance**

|                   |                             |
|-------------------|-----------------------------|
| Measurement Speed | 1 ms / data point (typical) |
|-------------------|-----------------------------|

**Measurement Ranges & Resolution**

|                               |                            |
|-------------------------------|----------------------------|
| Return Loss Measurement Range | 0 to 60 dB                 |
| Return Loss Resolution        | 0.01 dB                    |
| VSWR Measurement Range        | 1:1 to 65:1                |
| VSWR Resolution               | 0.01                       |
| Cable Loss Measurement Range  | 0 to 30 dB                 |
| Cable Loss Resolution         | 0.01 dB                    |
| Phase Measurement Range       | -180° to +180°             |
| Phase Resolution              | 0.01°                      |
| Smith Chart Resolution        | 0.01                       |
| Distance-to-Fault (DTF) Range | 0 to 1500 m (0 to 4921 ft) |

**Calibration**

|                             |                                 |
|-----------------------------|---------------------------------|
| Supported Calibration Types | Standard OSL, InstaCal, FlexCal |
|-----------------------------|---------------------------------|

**Environmental**

|                     |                                      |
|---------------------|--------------------------------------|
| Relative Humidity   | 5% to 95% at +40 °C (non-condensing) |
| Maximum Altitude    | 4600 m (15,092 ft)                   |
| Shock and Vibration | MIL-PRF-28800F Class 2               |

**Display**

|                    |                  |
|--------------------|------------------|
| Display Resolution | 800 x 600 pixels |
|--------------------|------------------|

**Options & Upgrades**

|                                                  |                 |
|--------------------------------------------------|-----------------|
| Internal Power Meter (Option 29) Frequency Range | 10 MHz to 4 GHz |
|--------------------------------------------------|-----------------|

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**TECHNOLOGY**

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RF / Microwave

**APPLICATIONS**

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Base station maintenance, cellular network testing, cable and antenna installation

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Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.