

## 1.3GHz & 2.7GHz Handheld Spectrum Analysers PSA1301T and PSA2701T

W = 97 H = 169 D = 47mm Weight 480g

- Frequency range 150kHz to 1.3GHz (PSA1301T) or 1MHz to 2.7GHz (2701T)
- Full colour TFT screen, 480 x 320 pixels
- Handheld format, weight under 500 grams
- 4 hour battery life per charge or AC power
- Integrated tilt stand for bench top use
- Zero span mode with AM/FM demodulation
- Continuous, Single, Peak hold and Average sweep modes
- 80dB dynamic range, -93dBm noise floor
- RBW of 1MHz, 280kHz or 15kHz
- Twin markers with absolute/difference
- Smart marker movement with peak finding
- Unlimited storage for waveforms, set-ups and fully annotated screens
- Data transfer to PC for analysis and printing
- Integrated handheld computer providing word processing, spreadsheets etc.

The PSA1301T and PSA2701T utilise the power of a handheld computer to provide a level of performance that was previously impossible for an instrument of this small size and low cost. The result is RF spectrum analysers of high functionality in a compact and lightweight format. Ideal for field applications, their low cost will also make them attractive for many bench top applications.

They incorporate a Palm Tungsten TX handheld computer within their housing to create a single integrated instrument. Access to the USB port is provided within the body of the instrument, and all of the functionality of the handheld computer is retained, however it can be removed from the instrument if required.

### Display

Display Type	3.7" (9.4 cm) backlit colour TFT, 480 x 320 pixels (half VGA)
Waveform Area	300 x 320 pixels (320 samples), 8 x 10 division graticule
Waveform Traces	Live trace and Reference trace (selectable) in different colours
Default Annotations	Centre Freq., Span (or Start + Stop), Ref. Level, RBW, Marker Frequencies, Marker Amplitudes, Sweep type, Attenuator setting

### Control

Modes	Choice of Hard Key or Touch Screen control for all functions
Numeric Entry	By numeric keypad or by jog and scroll

### Frequency

Frequency Range	320 kHz to 1300 MHz (PSA1301T) 1 MHz to 2700 MHz (PSA2710T)
Setting Modes	Centre + Span, or Start + Stop, or Zero span with demodulation
Setting Resolution	1 kHz (7digits maximum)
Span	320 kHz to 1299.85 MHz or zero span (PSA1301T) 320 kHz to 2799 MHz or zero span (PSA2701T)

Frequency Stability	± 10 ppm ± 3 ppm/year
Markers	Single or dual markers, differentiated by colour
Marker Modes	Manual scroll or automatic peak finding/tracking
Marker Accuracy	0.3% of span ± 0.1 kHz
Demodulation	AM/FM selectable (zero span mode), variable level output

### Amplitude

Displayed Amplitude Range	80 dB (10dB/div) or 40 dB (5dB/div with vertical panning)
Marker Resolution	0.1 dB
Reference Level	Selectable as -20 dBm or 0 dBm
Linearity and Accuracy	Linearity < ±1dB, Reference level accuracy <±2dB
Noise Floor	Average displayed noise floor typically < -93dBm (ref. level -20dBm, RBW 15kHz)

### Sweep

Sweep Modes	Continuous, Single, Peak Hold, or Average (2 to 256 sweeps)
Resolution Bandwidth (RBW)	280 kHz or 15 kHz (PSA1301T) 1 MHz, 280 kHz or 15 kHz (PSA2701T)

### Storage Capability

Trace Storage	Storage for unlimited number of traces with user filenames
Set-up Storage	Storage for unlimited number of set-ups with user filenames

Screen Storage                      The whole screen area can be stored as a bitmap for printing or viewing.  
Unlimited number of screens with user filenames

**Connectors**

RF Input                              SMA connector, 50W impedance; VSWR <1.5:1 typical  
Audio Out                            3.5mm phones jack for demodulated audio  
USB Through                        Mini USB socket - direct access to USB of the handheld computer  
Power Input                         1.3mm power jack for external power and recharging

**Handheld Computer Type**

Palm Tungsten TX, 312MHz Intel Xscale processor, 128MB Flash Memory, 480x320 portrait/landscape screen, WiFi, Bluetooth, SD/MMC card expansion, compatibility with Word, Excel, Outlook etc.

**Power Sources**

Battery Operation                 Internal NiMh batteries giving typically 4 hours operation  
External Power                     External power supply/charger, 100V to 240V universal input

Description	Mfrs. List No.	Farnell Order Code
1.3GHz Specrtrum Analyser	PSA1301T	107-6496
2.7GHz Specrtrum Analyser	PSA2701T	134-7345