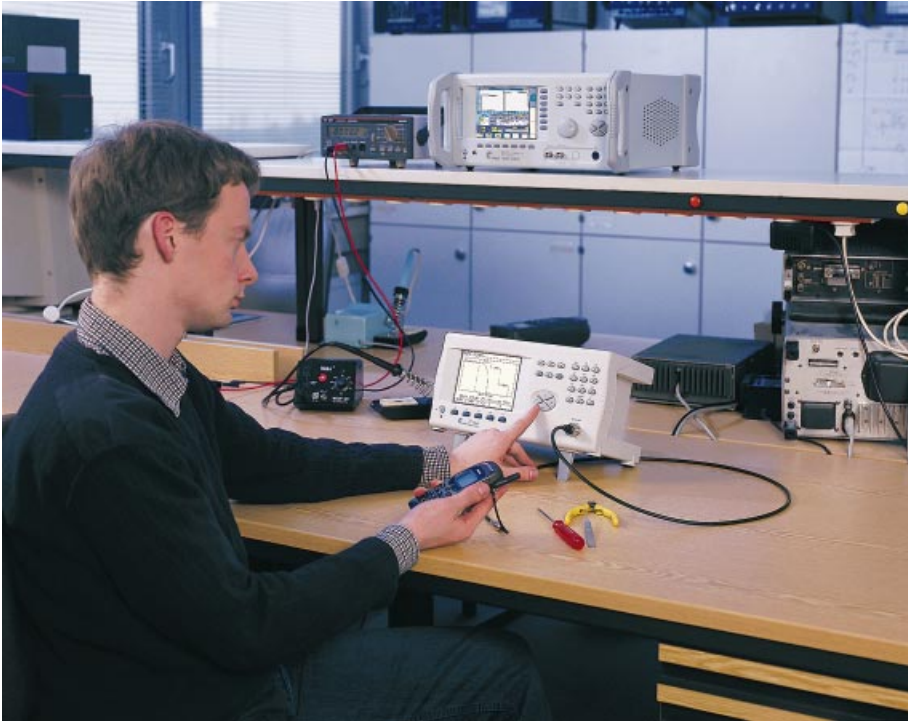


# Acterna 4200S Series Mobile Service Tester



## Features

- *Standard GSM tests*
- *Service/Asynchronous Mode*
- *Triple-band testing*
- *SMS/Data channel testing*

## Highlights

- Easy to use: multiple language user interface in English, German, French, Italian and Chinese
- Software Updates are available on the Internet
- Two different models (4201S and 4202S) for various user groups
- Remote control and built-in AUTOTEST

## Applications

- Test and alignment of mobile phones in service shops and depots
- End test in production
- AM Suppression with the AM Signal Generator Option
- Specific manufacturer options for dedicated tests available



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The Keepers of Communications

# Specifications

## Basic RF data

Input/output impedance ..... 50  $\Omega$   
VSWR ..... <1.3  
RF input/output ..... N-type, female  
Internal reference frequency ..... 13 MHz  
Aging .....  $10^{-6}$ /year  
External ref. input ..... BNC-type, female  
5/10/13 MHz

## RF Generator

### Frequency range

GSM 900, E-GSM, GSM-R  
935 to 960 MHz ..... (Channel 1 to 124)  
925 to 935 MHz ..... (Channel 0, 975 to 1023)  
921 to 925 MHz ..... (Channel 955 to 974)  
GSM 1800  
1805 to 1880 MHz ..... (Channel 512 to 885)  
GSM 1900  
1930 to 1990 MHz ..... (Channel 512 to 810)

### Reference frequency accuracy

(without external  
reference oscillator) ..... <  $10^{-6}$

### Output level accuracy

For levels -110 to -38 dBm ..... <0.9 dB  
Operating temperature range ... +20 to +30 °C

### Output level range

GSM 900 ..... -38 to -117 dBm  
GSM 1800/1900 ..... -44 to -117 dBm

### Resolution

0.1 dB

## RF Analyzer

### Frequency range

GSM 900, E-GSM, GSM-R  
890 to 915 MHz ..... Channel 1 to 124  
880 to 890 MHz ..... Channel 0, 975 to 1023  
876 to 880 MHz ..... Channel 955 to 974  
GSM 1800  
1710 to 1785 MHz ..... Channel 512 to 885  
GSM 1900  
1850 to 1910 MHz ..... Channel 512 to 810

### Frequency error measurement

Measurement range .....  $\pm 10$  kHz off carrier  
Usable range .....  $\pm 45$  kHz  
Measurement accuracy:  
GSM 900 ..... <15 Hz  
GSM 1800/1900 ..... <25 Hz

### Power level measurement

Measurement range:  
Burst mode ..... -20 to +39 dBm  
CW mode ..... -20 to +33 dBm  
Measurement accuracy ..... <0.9 dB

## Power/Time template

Dynamic range ..... >40 dB

## Phase error measurement

Measurement range ..... 1.5° to 20° rms  
Measurement accuracy:  
GSM 900 ..... <0.8° rms  
GSM 1800/1900 ..... <1.4° rms

## General data

Serial interface ..... D-Sub 9, female  
4800, 9600, 19 200,  
38 400 Baud  
Printer interface ..... D-Sub 25, female  
Mains voltage range ..... 100 to 250 VAC  
Mains voltage frequency ..... 50 to 60 Hz  
Power consumption ..... 17 Watts  
Storage temperature ..... -30 to +50 °C  
Operating temperature ..... +15 to +35 °C  
Size ..... 310 × 170 × 165 mm  
Weight ..... 2.4 kg

# Ordering Information

## Standard delivery

Acterna 4200  
Operating Manual ..... M 290 013  
Test SIM ..... M 860 188  
Plug-in adapter (full size) ..... M 860 175  
RF connecting cable ..... M 860 407  
Power cable ..... M 860 603  
Centronics cable ..... M 860 378  
RS232C cable ..... M 860 379

## Ordering details

Acterna 4201S ..... M 101 301  
Acterna 4202S ..... M 101 302  
Upgrade 4201S to 4202S ..... M 248 500  
Detuning Option ..... M 248 505  
4201S AM Signal Generator package  
(incl. Option) ..... M 101 351  
4201S AM Signal Generator package  
(incl. Option) ..... M 101 352  
AM Signal Generator Option ..... M 248 507  
AM Signal Generator Upgrade ..... M 248 506

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Acterna is present in more than 80 countries.  
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