**Specifications**

|  |  |  |
| --- | --- | --- |
| RF data, measurement speed | | |
| Frequency range | R&S®TSML-G/-W/-C/-GW, R&S®TSMU, R&S®TSMQ | 80 MHz to 3 GHz |
| R&S®TSML-CW | | 80 MHz to 6 GHz |
| Noise figure | f < 2.2 GHz, preamplifier on | typ. 10 dB |
| Frequency accuracy | GPS/PPS synchronization | ±0.01 ppm |
| Frequency aging |  | 1 ppm/year |
| Frequency temperature drift | 0 °C to +30 °C | 2 ppm |
|  | +30 °C to +40 °C | additional 2 ppm/10 °C |
| IP3 | preamplifier on | typ. -9 dBm |
|  | preamplifier off | typ. +3 dBm |
| 1 dB compression |  | -15 dBm |
| Sensitivity | GSM | -112 dBm |
|  | WCDMA | -114 dBm |
|  | CDMA2000® 1xEV-DO | -131 dBm |
|  | spectrum | -115 dBm |
| Dynamic range | GSM (C/I) | 30 dB |
|  | WCDMA (Ec/I0: high speed/high dynamic range) | 20 dB/29 dB |
|  | CDMA2000® 1xEV-DO (Ec/I0) | 30 dB |
| R&S®TSML |  |  |
| Measurement speed | R&S®TSML-G (GSM) | 40 channels/s 11 |
|  | R&S®TSML-W (WCDMA) | 10 measurements/s 21 |
|  | R&S®TSML-C (CDMA2000® 1xEV-DO) | 5 measurements/s 31 |
|  | R&S®TSML-CW (CW) | 625 measurements/s |
|  | R&S®TSML-GW (GSM and WCMDA) | 40 channels/s 11 (GSM), 10 measurements/s (WCDMA) |
| R&S®TSMU | | |
| Measurement speed | GSM | 80 channels/s 11 |
|  | WCDMA | 20 measurements/s 21 |
|  | CDMA2000® 1xEV-DO | 10 measurements/s 31 |
|  | CW | 625 measurements/s |
| R&S®TSMQ | | |
| Measurement speed | GSM | 100 channels/s 11 |
|  | WCDMA | 50 measurements/s 21 |
|  | CDMA2000® 1xEV-DO | 10 measurements/s 31 |
| CW | | 625 measurements/s |

|  |  |  |
| --- | --- | --- |
| General data | | |
| Operating temperature range |  | 0 °C to +45 °C |
| Storage temperature range |  | -20 °C to +70 °C |
| Relative humidity | at +40 °C | 95 % |
| RF input | SNAP-N connector | 50 Q |
| Data interface |  | FireWire |
| Voltage supply |  | 9 V to 18 V DC |
| Current drain |  | 650 mA at 12 V DC |
| Dimensions | W x H x D | 150 mm x 80 mm x 170 mm  (5.90 in x 3.15 in x 6.69 in) |
| Weight |  | 1.5 kg (3.3 lb) |
| System requirements | R&S®ROMES4 drive test software,  laptop/PC (multicore processor 2 GHz, 2 Gbyte RAM, FireWire, USB) | |

1. With SCH demodulation.
2. With SIB decoding.
3. With demodulation of CDMA2000® and EV-DO system information messages.

**Ordering information**

|  |  |  |
| --- | --- | --- |
| Designation | Type | Order No. |
| R&S®TSML | | |
| Scanner for GSM | R&S®TSML-G | 1153.6000.13 |
| Scanner for WCDMA | R&S®TSML-W | 1153.6000.11 |
| Scanner for CDMA2000® 1xEV-DO | R&S®TSML-C | 1153.6000.12 |
| Scanner for GSM and WCDMA | R&S®TSML-GW | 1153.6000.20 |
| Scanner for CW | R&S®TSML-CW | 1153.6000.15 |
| R&S®TSMU | | |
| Radio Network Analyzer | R&S®TSMU | 1153.6000K02 |
| R&S®TSMU Option for GSM | R&S®TSMU-K13 | 1153.4572.02 |
| R&S®TSMU Option for WCDMA | R&S®TSMU-K11 | 1153.4550.02 |
|  | R&S®TSMU-K14 | 1153.4614.02 |
| R&S®TSMU Option for CDMA2000® 1xEV-DO | R&S®TSMU-K12 | 1153.4608.02 |
| R&S®TSMU Option for CW | R&S®TSMU-K15 | 1153.4595.02 |
| R&S®TSMQ | | |
| Radio Network Analyzer for GSM, WCDMA, CDMA2000® 1xEV-DO and CW | R&S®TSMQ | 1153.6000.50 |
| Accessories | | |
| Power Supply (2.5 A) | R&S®TSML-Z1 | 1503.4320.02 |
| Power Supply (6.5 A) | R&S®TSMU-Z1 | 1166.3786.02 |
| Rack Adapter | R&S®TSMU-Z2 | 1153.6700.02 |
| Backpack System | R&S®TSMU-Z3 | 1153.6900.02 |
| Additional software options | | |
| Drive Test Software | R&S®ROMES4 | 1117.6885.04 |
| R&S®TSMx Driver | R&S®ROMES4T1Q | 1117.6885.40 |

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Your local Rohde & Schwarz expert will help you find the optimum solution for your requirements and will be glad to

provide you with a customized quotation. You will find your local contact at

[www.sales.rohde-schwarz.com](http://www.sales.rohde-schwarz.com)

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Rohde & Schwarz is an independent group of companies specializing in electronics. It is a leading supplier of solutions in the fields of test and measurement, broadcasting, radiomonitoring and radiolocation, as well as secure communications. Established 75 years ago, Rohde & Schwarz has a global presence and a dedicated service network in over 70 countries. Company headquarters are in Munich, Germany.



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Certified Quality System

ISO 9001

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