# **Technical data**

### RF generator

Frequency spectrum 925 to 960 MHz (GSM 900)

1805 to 1880 MHz (GSM 1800) 1930 to 1990 MHz (GSM 1900)

Generator output level GSM 900:

-45 to -110 dBm ( $\pm 1.5$  dB)

 $(4105^{1}/4107 light/4107 models)$  GSM 1800/1900: -50 to -110 dBm (±1.5 dB) Generator output level GSM 900: -45 to -110 dBm ( $\pm 1.0$  dB)

(4107S model GSM 1800/1900:  $-50 \text{ to } -110 \text{ dBm } (\pm 1.0 \text{ dB})$ 

Generator frequency error 1 ppm

# TX measurement

Frequency spectrum 880 to 915 MHz

1710 to 1785 MHz 1850 to 1910 MHz

Frequency error measurement<sup>2</sup>

within 5 kHz offset from carrier

GSM 900:

±25 Hz

RF power measurement (burst)

GSM 1800/1900: ±50 Hz

Phase error measurement<sup>2</sup>

+39 to -20 dBm ( $\pm$ 1.5 dB) usable up to +45 dBm

within measurement range 1.5 to 20° rms

GSM 900:

 $\pm 1.5^{\circ}$  rms

GSM 1800/1900: ±2.5° rms (±2.0° rms 4107S model)

) GSM 1900 only

2) Average of 10 measurements

## General data

Size 250 mm x 110 mm x 95 mm

Weight 1.5 kg

Permitted storage temperature -30 °C to +50 °C

Working temperature +15 °C to +35 °C

Handling Avoid the following during operation and storage:

- strong direct sunlight
- vibrations, heavy impacts
- ingress of liquids or small objects into the device
- bending of the RF adapter cable
- contamination of the electrical contacts

# After unpacking

- Do not throw the packaging of your WAVETEK 4100 away. It will make shipment easier if you want to have your model upgraded later (see also page 6-22).
- Check that the delivery is complete:

### Standard items supplied



101 2XX	1 x WAVETEK 410X
860 179	1 x Test SIM, plug-in format
860 175	1 x SIM adapter (from plug-in to full-size format)
290 012	1 x User Guide
860 090	1 x Power supply unit with power cord and connecting cable

Options/extra accessories For a list of useful options and extra accessories refer to Chapter 6.

Check that the unit is undamaged:



860 409 1 x RF adapter cable

Do not attempt to operate a WAVETEK 4100 if there is obvious damage to the device, the power supply unit or the accessories. Retain the packaging and contact the office who supplied the equipment.

# Accessories and options

	Standard accessories
Order numbe	Pr Description
860 17	9 Test SIM, plug-in format
860 17.	5 SIM adapter from plug-in to full-size format
860 09	
860 40	Purpose: connecting cable between any RF adapter (extra accessory) and a WAVETEK 4100
290 01:	2 User Guide
	■ Extra accessories
860 XX	RF adapters for different mobile phones (see page 6-36)
248 330	Universal Antenna Coupler (see page 2-18)
860 261	
860 262	2 Antenna, 1.8/1.9 GHz Purpose: wireless testing of mobile phones
384 876	Centronics adapter cable (2.5 m)  Purpose: attaching a printer with a Centronics interface to a Wave Tex 4100
384 875	Serial adapter cable (D-Sub 9; 2.5 m)  Purpose: attaching a PC with an RS-232-C port to a  WAVETEK 4100
384 877	Universal adapter cable (RS-232-C/Centronics)  Purpose: attaching a WAVETEK 4100 to the serial port of a PC and to a printer (parallel port)
860 252	Carrying case
860 251	Shoulder bag

■ Options 897 110 Utility Software plus User Guide Purpose: menu-driven creation of user-defined AUTOTESTs with individual selection of the range of testing of the limits for PASS/FAIL assessment

897 12X Upgrade to WAVETEK 4107 model (see page 6-22)

897 12X Upgrade to WAVETEK 4107S model (see page 6-22)