

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Find the *VIAVI Solutions / JDSU / Wavetek 3600D* at our website: *Click HERE*

TDMA

The TDMA option provides comprehensive modulation tests, BER, mobile-reported BER, MAHO RSSI, complete call processing, and voice tests using the Vocoder.

IS-136

The IS-136 option allows generation of Forward and Reverse Digital Control channels or custom Digital Control channels for increased flexibility.

PCS

PCS capability can be achieved with the FEX option, combined with the TDMA or CDMA option, providing a complete dual band test set. The options provide IS-95A and J-STD-008 signaling and measurements, and IS-136A Digital Control Channel testing.

CDMA

CDMA testing provides call processing including softer and hard hand-offs, power control, waveform quality, OCNS and AWGN sources, and optional Voice Codec.

Versatile Design Allows Upgrade And Evolution

Wavetek's 3600D combines previous experience and future vision in proven features and expandable platform. All TIA formats are covered, including AMPS, NAMPS, TDMA (IS-54B and IS-136), and extensive test coverage of CDMA (IS-95A/98). All these digital formats are available at PCS frequencies using a self-contained frequency extension module (FEX). Japanese and Korean frequency band specifications are also covered.



Up to four optional modules can be simply installed. Using flash memory and the on-board floppy disk drive, straightforward field upgrades can be made. Modules can be purchased as technology develops and customers' needs change, as the 3600D's easy upgrade path preserves your investment in equipment, programs, and training.

Quick, Repeatable Testing With AUTORUNs

The 3600D's comprehensive MS-DOS based programming capability means that any test which can be performed manually can be included in an AUTORUN. AUTORUNs can be helpful for specific phones which may require unique tests and for carriers who require specific tests for phones within the system.

Custom AUTORUNs are supplied by the carrier or phone manufacturer, or written to user specification. Each 3600D comes with five AUTORUNs in memory and additional examples on a 3.5" diskette. The 3600D stores five AUTORUN tests internally and accepts 3.5" diskettes for more.

Large Comprehensive Display

The 3600D's large LCD screen can be viewed at up to 45° angle, allowing key parameters to be viewed without squinting or constant adjustment — ideal for a busy service bench. Comprehensive displays of parameters are included on the summary screens.

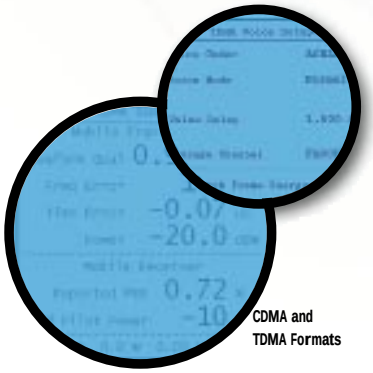
Channel, base power level, mobile power level, and system parameter set-up readings are always displayed at the bottom of the screen.


Easy-To-Read Display

CDMA Capabilities for Cellular and PCS

Upgrading the 3600D is easy. With the new CDMA module, technicians can perform call processing, transmitter tests, and receiver tests. Built-in AMPS and NAMPS protocols are standard, while PCS coverage is provided with an optional FEX module. Based upon requirements of IS-95A and J-STD-008, the 3600D's extensive call processing capabilities include registration, authentication, and softer and hard handoffs.

In the critical area of power control, closed loop and open loop power control are supported. Speech coding can use pre-recorded, loop-back, or an optional 8K/13K Vocoder to check voice quality.



CDMA and TDMA Formats

The 3600D's signal generator provides pilot, sync, paging, and selectable traffic channels. An Additive White Gaussian Noise source with 30 dB troubleshooting range allows real world receiver testing. The constellation display shows the symmetry of the modulator and checks for skew and origin offset. Residual ρ is better than 0.97 for confidence in receiver testing.

Highly accurate, the transmitter analyzer provides power measurements of ±0.65 dB +0.003 dB/dB (below +40 dBm) over temperature. The high ρ accuracy is ±0.003 is ideal for phone troubleshooting non-linearity or amplifier defects.

TDMA Testing, IS-136, and Voice Codecs

Testing digital phones is simple and effective with the 3600D. Authentication, Call Waiting, SMS, and Calling Number ID test capabilities allow phone features to be thoroughly checked. The standard VSELP Codec allows technicians to check voice quality end-to-end, while the new ACELP Voice Codec option



Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com



Simple Operation

tests voice quality for IS-136 PCS phones and preserves loopback voice tests for VSELP or ACELP.

The 3600D's large display with limit lines allows technicians to check burst envelope to look at specification compliance, overshoot, and timing problems. Extensive receiver analysis with BER, mobile-reported BER, and MAHO RSSI checks phone performance.

For comprehensive transmitter testing, power and frequency measurements, RMS Vector Error, and Peak Vector Error are provided. Magnitude and Phase Error, Origin Offsets, and Burst Amplitude droop allow accurate characterization of the mobile. The constellation display helps technicians check in-phase and quadrature signals for misalignment and permits modulator troubleshooting.

Productivity Enhancing Features

Accurate and repeatable measurement performance provides confidence in phone testing. A 'C' message filter, together with 50 Hz to 300 Hz highpass and 3, 15, and 30 kHz lowpass filters, provides flexibility in evaluating new phones.

Remote Control Options

Fast operation using the optional GPIB remote control ensures rapid assessment of phones in factory installed, fully automatic test systems. Comprehensive capabilities allow factory QC systems to be used at repair depots to check performance. RS-232 control is also provided for PC control in service shops.

Cable Loss Calibrator

Power accuracy via cable connection is enhanced using the built-in cable calibrator. With this feature, cables used for automobile installation can be calibrated and intermittent or faulty RF cables located.

Soft Keys Give Easy Access

All manual screens have soft keys to help technicians maneuver through comprehensive test screens. Operating an extensive test or improving response time is enhanced using the soft keys.



3.5" Floppy Disk Drive

Automatically Exit And Return To Manual Operation

During an AUTORUN, the technician can pause on a failure, use manual mode to adjust a particular parameter, and easily return to the AUTORUN.

Affordable, Easy Custom Programming

To avoid expensive programming costs, test routines can be simply customized using a standard MS-DOS based text editor and PC. Up to five AUTORUN routines can be internally stored, while a 3.5" diskette holds additional programs. For example, AUTORUNs can simplify:

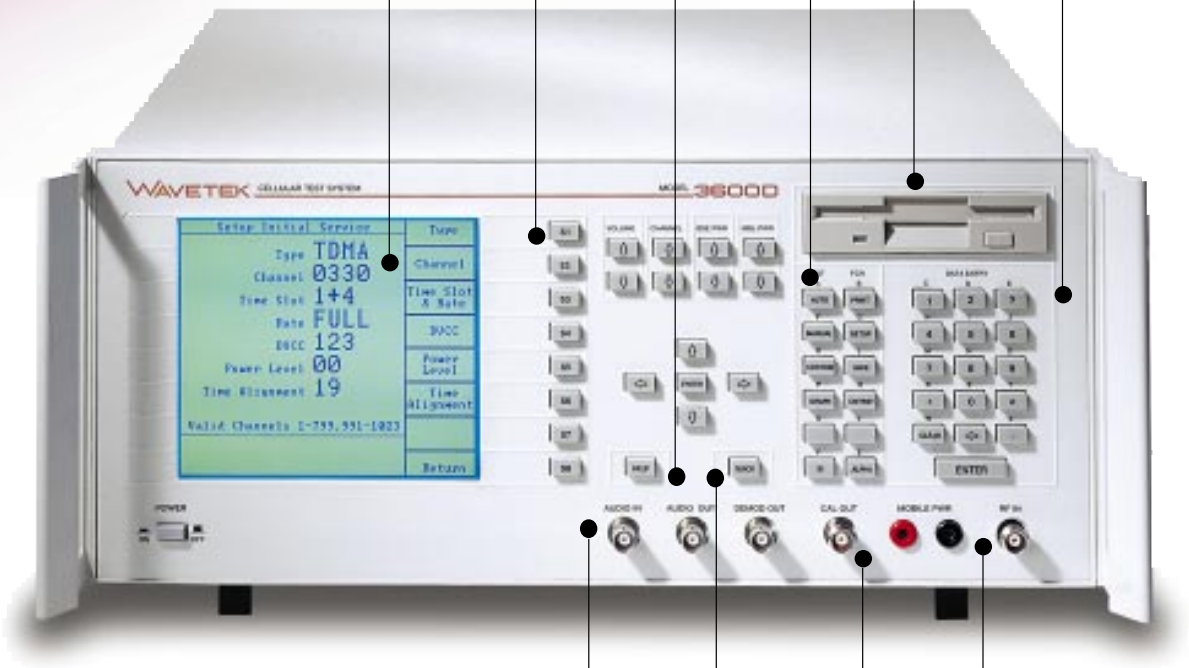
- 30-second inspection tests for verifying general operation
- Custom tests for phone repair
- Intermittent fault finding tests

One Button Access Simplifies Operation

One push of the ID button provides ESN, MIN and SCM data to verify correct phone programming.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Logical Ease of Use



Model 3600D

WAVETEK®

General Specifications

Physical Specifications
Height x Width x Depth: 7" x 19.5" x 16.5"
Weight: 37 lbs.

Temperature Range
Operating: 10° to 40°C
Storage: -20° to 70°C

Power Requirements
Voltage: 85 to 264 VAC
Current: 5A maximum
Frequency: 47 to 440 Hz

External Interfaces
Printer: Centronix, Parallel
Control: RS-232
GPIB: IEEE Standard 488

Standard Modes
AMPS
NAMPS

Optional Modes
TDMA IS-54B
TDMA IS-136 Basic
TDMA IS-136 Custom
CDMA IS-95, IS-95A
CDMA J-STD-008 (PCS CDMA)
J-CDMA Japan Cellular (832-870 MHz)

Voice Codec
VSELP (standard for TDMA mode)
ACELP (optional for TDMA mode)
QCELP (optional for CDMA mode)

Frequency Extension (FEX)

US PCS	Base TX 1930-1989.96 MHz
	Base RX 1850.04-1909.98 MHz
Korean PCS	Base TX 1805-1870 MHz
	Base RX 1715-1780 MHz
Bypass Mode	Base TX 869.04-893.97 MHz
	Base RX 824.04-848.97 MHz

Ordering Information

Basic Unit

3600D Cellular Test Set	1010-00-0315
Includes: AMPS/NAMPS	
TNC to TNC Cable	
TNC to Mini-UHF and SMA Adapters	
Parallel Printer Cable	
RS-232 Cable	
DB9 to DB25 Cable	
Operator's Manual	

Test Options

CDMA Option	1019-00-0563
Frequency Extension Option	1019-00-0562
TDMA Option	1019-00-0421
ACELP Option	1019-00-0582
IS-136 Basic Option	1019-00-0535
IS-136 Custom Option	1019-00-0534

Accessories

OSC1 Oven Controlled Oscillator	1019-00-0436
GPIB Communication Port	1019-00-0434
PRN-1 Portable Printer	1010-00-0329
External 10 MHz Reference	1019-00-0459

Your nearest representative:

Specifications are subject to change without notice.
Wavetek is a registered trademark of Wavetek Corporation.
© 1997 Wavetek Corporation

Worldwide Sales Offices

Austria
Wavetek Ges.m.b.H.
Pharos Haus
Nordbahnstrasse 36 / TOP 1.4
A-1020 Wien
Tel: (43) 1-214-5110
Fax: (43) 1-214-5109

China
Wavetek Corporation
Room 2701. CITIC Building
No. 19 Jianguomenwai Dajie
PRC-Beijing 100004
Tel: (86) 10-6592-8044
(86) 10-6500-2255
Fax: (86) 10-6500-8199

France
Wavetek S.A.
12 Boulevard des Iles
Immeuble Seine St-Germain, Bât. B
F-92441 Issy-les-Moulineaux Cedex
Tel: (33) 1-4190-6666
Fax: (33) 1-4190-6650

Germany
Wavetek GmbH
Gutenbergstrasse 2-4
D-85737 Ismaning
Tel: (49) 89-99641-0
Fax: (49) 89-99641-160

Hong Kong
Wavetek Hong Kong Ltd.
3A, HKPC Building
78 Tat Chee Avenue
HK-Kowloon
Tel: (852) 2788-6221
Fax: (852) 2788-6220

Japan
Yokogawa Electric Corporation
Measurement Division
155 Takamuro-cho, Kofu-shi
J-Yamanashi-ken, 400
Tel: (81) 552-43-0311
Fax: (81) 552-43-0396

North America
Wavetek Corporation
5808 Churchman Bypass
USA-Indianapolis, IN 46203
Tel: (1) 317-788-9351
Fax: (1) 317-782-4607

Singapore
Wavetek Asia-Pacific Pte. Ltd.
51 Goldhill Plaza # 14-04/05
SGP-Singapore 308900
Tel: (65) 356-2522
Fax: (65) 356-2553

United Kingdom
Wavetek Ltd.
Hurricane Way
GB-Norwich, Norfolk NR6 6JB
Tel: (44) 1603-404-824
Fax: (44) 1603-483-670

www.wavetek.com

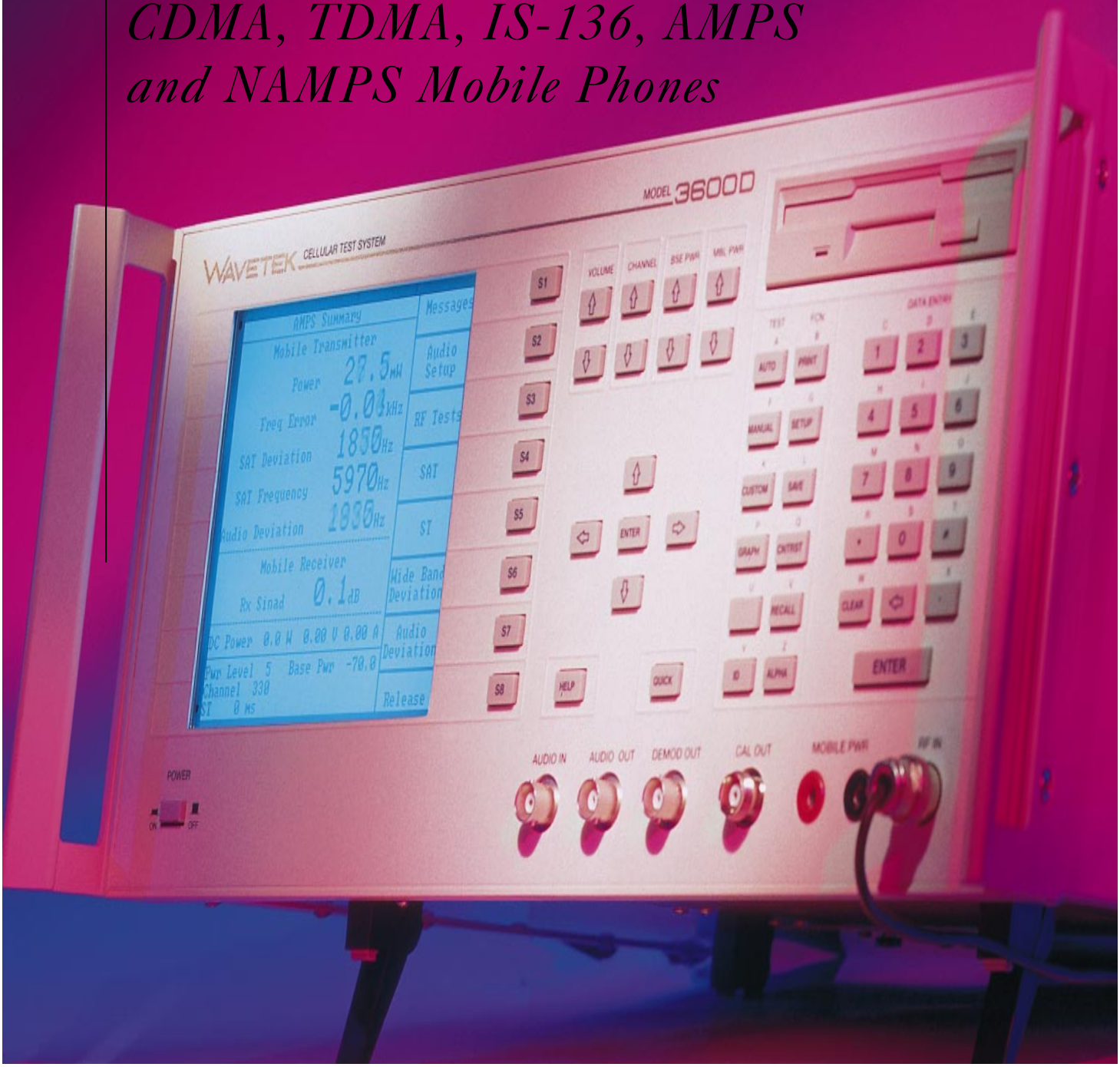
Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Model 3600D

WAVETEK

Versatility in Cellular and PCS Testing

Comprehensive Testing for CDMA, TDMA, IS-136, AMPS and NAMPS Mobile Phones



Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP