

Brochure

VIAVI

ATC-5000NG

ATC/DME Test Set and ADS-B Target Generator

Prepare for Global ATC Modernization with NextGen test technology.

The VIAVI ATC-5000NG is an RF signal generator/receiver for testing Mode 3/A, C and S transponders. The ATC-5000NG was designed with modern software defined radio technology and is the replacement product for the commercial functionality of the SDX-2000, ATC-1400A and S-1403DL. The ATC-5000NG is capable of performing most MOPS tests for DO-181E, DO-260, DO-260A, DO-260B, and DO-282B and is the ideal test equipment for engineering development, certification, manufacturing and service.

The ATC-5000NG tests the following:

- Transponders (Mode S/ADS-B Out)
- ADS-B In receivers
- UAT receivers
- 1090MHz DF18 Emitters (surface vehicles)
- ADS-B In Ground Station Receivers
- ADS-R, TIS-B Ground Station Transmitters
- DMEs



Features

- Target generation – independently configure up to 600 ADS-B, TIS-B, or ADS-R target types (32 dynamic and 568 static); ATCNGOPT03 Multi-receiver option required
- Software-driven design allows for field updates to add new features, capabilities or modifications
- ADS-B squitter decode and logging for ADS-B Out testing (DO-260, DO-260A and DO-260B data parsing)
- DO-260B MOPS preconfigured tests available (Option ATCNGOPT06)
- Generates ATCRBS/Mode S interrogations
- Multi-receiver test capability (ATCNGOPT03)
- UAT TX/RX capability (ATCNGOPT02)
- Pulse and frequency measurement
- Remote controlled via GPIB or Ethernet
- Two independent transmitters and receivers
- TX/RX data logging capability
- Legacy command set option
- Full diversity testing capability
- Data parsing in engineering units

Benefits

- Internal pulse measurement capability eliminates need for oscilloscope
- Support for Air Traffic Control Modernization mandates (NextGen, SESAR)
- Modern architecture design will support future standards changes

Ordering Information

Versions and Options

Order Number	Description
138156	ATC-5000NG Transponder Test Set
139311	ATCNGOPT01 DME Option
138157	ATCNGOPT02 UAT 978MHZ Option
138159	ATCNGOPT03 Multi-receiver Option
138158	ATCNGOPT04 SDX-2000 Command Set Compatibility Option
138223	ATCNGOPT05 ATC-1400A /S-1403DL Command Set Compatibility Option
139310	ATCNGOPT06 DO-260B MOPS Test Option (requires Multi-Receiver Option)

Standard Accessories

114114	Keyboard w/ touchpad
62302	Power cord, 110V
64020	Power cord set, 220V
139188	Operations Manual
139189	Getting Started Manual

Optional Accessories

142175	Pelican 1690 Transit Case, RGS-2000NG / ATC-5000NG
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Extended Warranty (2 year standard)

139170	36 months with scheduled calibration
139171	60 months with scheduled calibration

Physical Characteristics

Dimensions	10.5 in x 19 in x 24 in (26.7 cm x 48.3 cm x 60.9 cm)
Weight	41 lbs (18.6 kg) test set only 53 lbs (24.04 kg) shipping weight 89 lbs (40.37 kg) shipping weight with optional transit case

Environmental

Temperature

Full specified performance	23 °C, $\pm 5^{\circ}\text{C}$ (73.4 °F, $\pm 41^{\circ}\text{F}$)
Operating	0 to +40 °C (32 ° to 104 °F)
Storage	0 to +71 °C (32 ° to 159.8 °F)
Relative Humidity	0 to 95% noncondensing

Test Set Certifications

MIL-PRF-28800F (Class 3 Device)
CE
UL/EN 61010-1
EN 61326-1



Standard accessories include keyboard with touchpad.