Avionics ATC-5000NG ATC/DME Test Set





NextGen Transponder/DME Bench Test Set

The ATC-5000NG is an RF signal generator/receiver for testing Mode A, C and S transponders. The ATC-5000NG was designed with modern software defined radio technology and is replacement product for commercial functionality of the SDX-2000, ATC-1400A and S-1403DL. The test set was designed for engineering development, design validation, manufacturing and return-toservice testing.

Key Features and User Benefits

- Generates ATCRBS/Mode S interrogations
- 10.4 inch touch screen LCD display for operator control of all test set capabilities
- Remote controlled via GPIB or Ethernet
- Optional Command set emulation for SDX-2000, ATC-1400A and S-1403DL
- Software-driven design allows for field updates for adding new features, capability or modifications due to industry changes
- ADS-B squitter encode/decode
- DO-260, DO-260A and DO-260B data parsing
- Two independent transmitters and receivers
- TX/RX data logging capability
- Full diversity testing capability
- Data parsing in engineering units
- Pulse and frequency measurement
- UATTX/RX capability (optional)

TRANSPONDER MODE SPECIFICATIONS

TRANSMITTER

Frequency

Range 965 MHz to 1095 MHz

Resolution 100 KHz
Accuracy +10KHz

Power

Range -10 to -90 dBm

Resolution 1 dB

Accuracy ± 1 dB @ 1030 MHz

Port Top and Bottom

Pulse Modulation

Accuracy ± 0.05 uSecOn/Off Ratio>80 dBRise/Fall Time<100 nS</td>

External Pulse Modulation

1090/978 RECEIVER

 VSWR
 <1.4</td>

 Max Input Power
 +57 dBm

 Dynamic Range
 40 dB

 Dual Receiver
 Top/Bottom

Power Measurement

Range +17 to +57 dBm

Resolution 0.1 dB

Accuracy $\pm 1 dB @ 1090 MHz$

Frequency Measurement

Resolution 1 KHz
Accuracy \pm 1 KHz

Pulse Characteristic Measurement

Resolution 10 nS

PHYSICAL CHARACTERISTICS

 Power
 115/230 VAC, 50/60 Hz

 Height
 10.5 inches (26.67 cm)

 Width
 19 inches (48.26 cm)

 Depth
 16.5 inches (41.91 cm)

 Weight
 44 lbs. (19.95 kg)

FUNCTIONAL CHARACTERISTICS

REMOTE INTERFACE

Optional Command set emulation of the SDX-2000, ATC-1400A and S-1403DL

Ethernet GPIB

INPUTS/OUTPUTS

Suppression bus (front/back)

2 scope BNC outputs (front/back)

LAN (front/back)

USB Type B control (front)

2 USB Type A (front) for HID/flash drives

ORDERING INFORMATION

Order Number	Description
138156	ATC-5000NG Transponder Test Set
138160	ATCNGOPTO1 DME Option
138157	ATCNGOPT02 UAT 978MHZ Option
138158	ATCNGOPT04 SDX Command Set Comp
138223	ATCNGOPT05 1400/1403 Command Set Comp

CHINA Beijing

Tel: [+86] (10) 6539 1166 Fax: [+86] (10) 6539 1778

CHINA Shanghai

Tel: [+86] 21 2028 3588 Fax: [+86] 21 2028 3558

CHINA Shenzhen

Tel: [+86] (755) 3301 9358 Fax: [+86] (755) 3301 9356

FINLAND

Tel: [+358] (9) 2709 5541 Fax: [+358] (9) 804 2441

FRANCE

Tel: [+33] 1 60 79 96 00 Fax: [+33] 1 60 77 69 22

GERMANY

Tel: [+49] 89 99641 0 Fax: [+49] 89 99641 160

INDIA

Tel: [+91] 80 [4] 115 4501 Fax: [+91] 80 [4] 115 4502

JAPAN

Tel: [+81] (3) 3500 5591 Fax: [+81] (3) 3500 5592 KOREA

Tel: [+82] (2) 3424 2719 Fax: [+82] (2) 3424 8620

SCANDINAVIA

Tel: [+45] 9614 0045 Fax: [+45] 9614 0047

SINGAPORE

Tel: [+65] 6873 0991 Fax: [+65] 6873 0992

TAIWAN

Tel: [+886] 3 5500 338 Fax: [+886] 3 5502 065 UK Stevenage

Tel: [+44] (0) 1438 742200 Fax: [+44] (0) 1438 727601 Freephone: 0800 282388 USA

Tel: [+1] (316) 522 4981 Fax: [+1] (316) 522 1360 Toll Free: 800 835 2352



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www.aeroflex.com info-test@aeroflex.com