VIAVI
IFF-45TS
MK XIIA and TACAN Bench Test Set

A leading edge RF signal generator/receiver designed for engineering manufacturing and return-to-service applications

The IFF-45TS test set provides RF signal generation and parametric measurement of MK XIIA and TACAN equipment. Replies and interrogations can be individually configured to support testing requirements. ADS-B Out testing monitors ADS-B, TIS-B, ADS-R and Acquisition squitters. The IFF-45TS emulates either a TACAN ground transponder or a TACAN airborne interrogator, providing six TACAN test modes.

For a fully configurable automated test solution using the IFF-45TS as the RF source, see the VIAVI Solutions IFF-7300S Series Automated Test System.

Features

- MK XIIA AIMS certified for Level 1 and Level 2

- Supports DoD AIMS 04–900A Option A – KIV-78 & QRTK6 NG (with Airbus DS QRTK6 NG adapter) and Option B – KIV-77 & SIT-2010 crypto appliqués (part number 72438 only)

- Dual I/O for diversity testing of transponders or SUM/DIFFERENCE on interrogators

- Separate connections for direct or over-the-air testing

- Software defined radio design allows waveform flexibility and future growth potential

- Dual signal generator design allows coordinated signal production for interference and echo testing

- Remote interfaces consist of RS-232, Ethernet and GPIB

- Graphical User Interface (GUI) allows easy access to test features

- Test ranges of up to 3 km with appropriate antennas

Applications

- Engineering – Development and qualification testing for MK XIIA, ADS-B Beacon, and TACAN equipment

- Manufacturing –   factory calibration and verification testing

- Depot/Service – Level 1 and 2 return-to-service testing

- Support for DO-260B, AIMS 03–1000B, Amendment 1 and DO-181E certification testing

- Over-the-air platform testing of MK XIIA equipment including Mode 5, ADS-B beacons and TACAN interrogators

- Industry-wide use for development and end item testing of transponders and interrogators

Ordering Information

Versions and Options

Order Number	Description
72438	IFF-45TS Transponder Modes 1,2,3/A,4 (Internal Crypto),C,S (Mode 5 capable)
72439	IFF-45TS-A Transponder Modes 1,2,3/A,4 (Internal Crypto),C,S
140612	SERD 65A08, Kit, IFF-45TS Test Set
83404	45TSOPT1 IFF Transponder Mode 5 (for use with Order Number 72438 only)
83405	45TSOPT2 Interrogator Modes 1,2,3/A,C,S,4
83406	45TSOPT3 IFF Interrogator Mode 5 (for use with Order Number 72438 only, requires option 2 (83405))
83407	45TSOPT4 DME/TACAN
91684	45TSOPT5 ADS-B Out
140608	45TSOPT10 ADS-B Out Integrity Test App
112120	Kit, ADS-B Out (fielded units), IFF-45TS
112364	Kit, ADS-B Out (fielded units), IFF-45TS-A

NSN Information

6625-01-617-2567	IFF-45TS w/options 1, 2, 3, 6, 8, 9
6625-01-611-6485	IFF-45TS w/options 2 and 8

Standard Accessories

92053	PC Windows-based GUI (IFF45TS)
92054	Operation Manual (CD) (IFF45TS)
6138	Getting Started Manual (IFF45TS)
92053	PC Windows-based GUI (IFF45TS-A)
92054	Operation Manual (CD) (IFF45TS-A)
6141	Getting Started Manual (IFF45TS-A)
62302* or 62315**	AC power cord, *110V or **220V
30050	Serial data cable, 9 pin D, 1.5 meters

Extended Warranty (2 year standard)

84363	36 months with scheduled calibration
84364	60 months with scheduled calibration

Optional Accessories

88631	45TSOPT6 KIV 77 adapter (Opt B)
89879	45TSOPT8 KIT/KIR-1A/C adapter
86075	45TSOPT9 KIV 78/KIV 6 adapter (Opt A)
63975	Controller w/ touch-screen monitor, w/ Mode 5 GUI
140416	Controller w/ touch-screen monitor, w/ Mode 4 GUI
112349	UC-584 coupler kit, dual antenna
112350	UC-584 coupler kit, single antenna
138553	Kit, Laptop with IFF45TS Mode 4 GUI
138552	Kit, Laptop with IFF45TS Mode 5 GUI
138512	Transit Case, IFF45TS
93023**	IFF45TS Maintenance Manual
89345**	IFF45TS-A Maintenance Manual
91771	Antenna

**Includes remote program GUI

Physical Characteristics

Size: Test Set Only	4"H x 17.75"W x 21"D (10 cm x 45 cm x 53 cm)
Weight	24 lbs. (10 kg)

Environmental

Operational Temp.	-10° to +55°C (+14° to +131° F)
Storage Temp.	-10° to +55°C (+14° to +131° F)

Test Set Certifications

UL
CE
DoD AIMS MK XIIA Level 1 and Level 2

For complete certification list see IFF-45TS Specification Sheet

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