ATS100 FACTS

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A Finmeccanica Company

ATS100 FAQ

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Answers

What is it?

The ATS100 is a hand-held test unit that produces radar signals and can be used to test the Radar Warning Receiver systems on military aircraft. It allows you test the detection, identification and the correct direction indication of radar threats.

How does it work?

It has a set of radar threat parameters loaded into a removable data stick and it uses these to simulate real radar signals. The strength of these can be set in the instrument so that the sensitivity of an aircraft RWR can be determined.

How much RF power does it transmit?

Approximately 1W from 625 MHz to 18 GHz and 26 GHz to 40 GHz.

How long does the battery last?

It depends on use patterns but typically 4 to 5 hours of use. It is supplied with 2 batteries and a charger.

How do I enter test data?

The unit is provided with a PC program that allows new test programs to be written and new threats to be generated. It also simulates the operation of the test so that the program can be developed and tested before being used on the ATS100.

Where are the signal parameters stored?

The test program and threat parameters are stored in a USB stick that is inserted in the unit.

What about security – aren't the signal details classified?

To support the use of classified data, the ATS100 allows a hardware encrypted USB stick to be used. This requires username and password inputs which are made on the instrument touch screen.

Are there foreign language variants?

Yes – at present Italian, German and Spanish but others can be added. Since the user writes the test program (and the labels that appear on-screen) he can use any language that can be supported by the ATS100 operating system (Linux).

Is it expandable?

Yes – the present unit has the Ka-band option fitted but is there is provision for a laser rangefinder to be fitted (to measure the distance to the aircraft) and additional power and interfaces are available to support UV/IR EOical MAWS test unit that is in development.

What sort of modulations can it do?

The ATS100 transmits CW and pulse modulated signals. It has some limited AM capability. It cannot do FM signals.

Is it ITAR controlled?

No - the ATS100 is designed and produced in the UK and is not subject to ITAR controls.

Can the frequency range be extended?

The Ka-band module extends the frequency to 40 GHz.

When is it available?

It is in production now.

What is the approximate cost?

Depending on options, £30k to £45k

Does it need regular calibration?

It needs an output frequency and level check once a year.

Does it have to be in day-glow yellow?

It can be in any colour, the lead customer wanted it in hi-vis yellow.

Is it safe to use for the operator and bystanders?

There is an exclusion zone of .5m immediately in front of the unit. Providing this is observed, the unit meets European and US limits for RF radiation exposure for both the operator and any bystanders.

Does it need a license to operate?

This depends on individual countries. In general, its power is insufficient to cause problems given that it is generally operated in a controlled area.

What sort of range does it achieve?

Typically 4 to 5 meters (12 to 15 feet) over the frequency range.