

ATSA-3



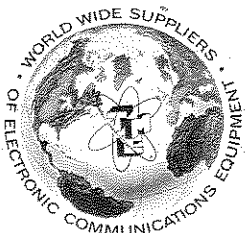
ATSA-3 ASSEMBLY SHOWN WITH STATION CONTROL UNIT
AND POLE MOUNT ANTENNA TUNER.

The ATSA-3 antenna tuning systems is a highly versatile automatic device which will remotely tune a 35 foot shipboard antenna to match the 50 ohm output of a 1 KW transmitter over the range of 2-30 Mhz. It will also tune into a long wire antenna as short as fifteen feet depending on frequency and antenna configuration.

The ATSA-3 consists of two parts; the station control unit and the completely sealed tuner normally located at the base of the antenna.

The control unit is completely solid state and is cable connected to the tuner. All necessary servo and pre-positioning controls are provided in the station unit as well as the power supply. Two front panel meters monitor "R" and phase sense. These enable the operator to monitor the status of the sensing circuits. Every attempt has been made to produce a "fail safe" device, and in the event of malfunction, the meters may be used to manually adjust the tuner. All parts are easily accessible for service and "LED" indicators continually indicate proper operation. Complete manual override is available.

The tuner is housed in a cast aluminum case completely protected from the elements by weatherproof fittings. Our tests have indicated that pressurization is not necessary, but the unit may be pressurized on special order. A humidity sensor is incorporated which will indicate if moisture accumulation is excessive.



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ATSA-3 TECHNICAL SPECIFICATIONS

Frequency Range: 2 – 30 Mhz
Input Impedance: 50 ohm unbalanced (tuned)
Input RF Power: 1-Kw PEP and average
Tuning Accuracy: 1.5:1 maximum
Tuning Time: 3 seconds nominal
Environment: 0 to 50° C
Power: 115/230 V ±10%, 50/60 Hz
RF Capability: USB, LSB, ISB, CW, FSK, AM
Mode of Operation: Automatic, semi-automatic, and manual
Antenna Matching Capabilities:

Designed to match a 35 foot standard antenna whip, will also tune into long wire antennae and whips as short as 15 foot depending on frequency and antenna configuration.

Tuner will tune on 40 watts to 200 watts automatically. No damage should result if the tuner is tuned at higher powers, but this is not recommended.

We reserve the right to
make engineering changes.



THE TECHNICAL MATERIEL CORPORATION

700 FENIMORE ROAD • MAMARONECK, NEW YORK 10543

SPRINGFIELD, VIRGINIA • OTTAWA, CANADA • LUZERN, SWITZERLAND • TEMPE, ARIZONA

(914) 698-4800 • (613) 822-0244 • twx 710-566-1100 • telex 013-446