

ATU 3100

HF Antenna Tuning Unit



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FEATURES

Output power	1 kW CW and PEP
Cooling	No external cooling required
Tuning	6000 frequencies memory Fast tuning algorithm (1 sec typ.) 25 msec tuning from memory Bite capability

Distance between transmitter and antenna	Up to 50 m
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Bypass function	Available
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GENERAL

The ATU 3100 is a 1 kW high quality remotely controlled antenna coupler, capable of providing efficient matching of antennas 7 m and longer to a 50 Ω transmission line, over the frequency range of 1.6 MHz to 30 MHz. In addition, the coupler may be used as a 'line flattener' to correct the VSWR to resonant antennas.



Hagenuk Marinekommunikation

A company of the ATLAS ELEKTRONIK Group

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TECHNICAL DATA

Frequency range	1.6 MHz – 30 MHz
HF input power	1000 Watts CW / PEP ± 1dB
Tuning memory	3x 2000 channels
Input impedance	50 Ω, non-reactive
Tuning time	Typ. 4 sec (10 sec max.) 25 msec from memory
Tuning accuracy	1.5 VSWR, or better on 99.5 % of all operating frequencies
Tuning power	25 W to 45 W
Tuneable antennas	> 7 m whip: 1.6 MHz – 30 MHz > 11 m whip: 1.6 MHz – 2 MHz - 1000 W PEP/500 W CW 2 MHz to 30 MHz: 1000 W PEP/CW Long wire: 15 m – 45 m with long wire adapter
Circuit protection	RF input spark gap Control line lightning impulse
Duty cycle	Continuous
RF connector	N-type
Interfaces	Antenna Power supply & control RS 422
Cable length between TRX and ATU	50 m with recommended cable Others on request
Power supply (from TRX 3100)	28 VDC, - max 5 A during tuning, max 2 A in idle mode

Environmental specifications	
Operating temp.	-30° C to + 65° C
Storage temp.	-55° C to + 85° C
Humidity	MIL-STD-810F, method 507.4
Shock	MIL-STD-810F, method 516.5
Vibration	MIL-STD-810F, method 514.5
Dimensions	
Height	238 mm
Depth	454 mm
Width	753 mm
Weight	Approx. 25.2 kg
MTBF	> 12.000 hours (normal operation)
MTTR	< 60 min



ATU 3100 connector side

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