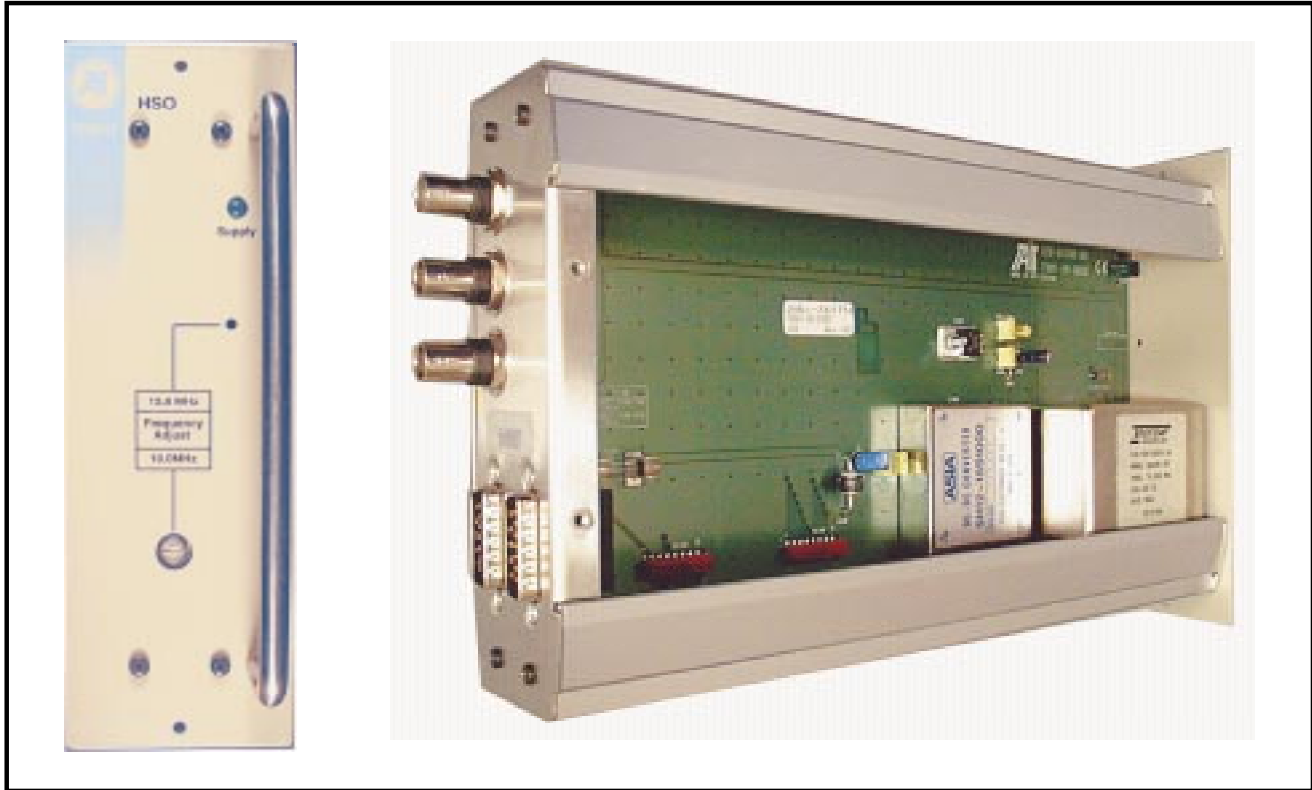




NEW PRODUCT ANNOUNCEMENT

T801-20-0000 Paging HSO



OVERVIEW

'Zero beating' due to RF carrier cancellation in overlap areas of similar signal strength can result in missed paging messages. Offsetting the paging carrier frequency of adjacent transmitters by well-defined amounts¹ can significantly improve reception in these overlap areas

To ensure that the offsets remain stable with temperature and time, transmitter carriers are phase-locked to a high stability oscillator such as the T801-20-0000. Implementing a proper frequency-offset plan will result in fewer missed messages.

The T801-20-0000 Paging High Stability Oscillator is a cost-effective external frequency reference source for use in low-speed Pocsag and Flex™ simulcast paging networks. It provides a 10MHz output, with 0.01ppm stability and manually adjustable offsets up to 5ppm.

The T801-20-0000 is compatible with all Tait T800 Series I and Series II T800 DFSK paging modulators that accept an external frequency reference, as well as the new T837-20-1021 integrated paging exciter. The module slides into a T800 style rack, mating with a pcb backplane which provides power and signal interfacing to the HSO, a T800 link receiver, and a T800 exciter. This configuration is thus ideal for small RF-linked simulcast paging systems.

¹ CCIR Rec.499 advocates offset at half the paging bit rate. Thus, optimal offsets for 1200bps Pocsag systems are +/- 600 Hz. Offsets less than this are acceptable, as the number of transmitters in the network increases.

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BENEFITS and OPERATIONAL FEATURES

Cost-effective Simulcasting	As many paging markets are mature and cost-competitive, the T801-20-0000 contains no unnecessary 'extra' features.
Reliability	<ul style="list-style-type: none">• Extensive use of smd technology.• Encapsulated dc-dc converter provides stable OCXO power supply• High quality OCXO provides stable reference
Multiple outputs	Can drive several transmitters off a single reference

TECHNICAL SPECIFICATIONS

Supply	10.8 to 16VDC, 13.8V nominal
Supply Current	Approx 700mA on warm-up, 300mA quiescent
Operating Temperature	-30 to +60 deg C
Output Frequency	10MHz, sinusoidal
Output Impedance	50ohms
Output Level (each port)	+3dBm, not adjustable
Number of Outputs	3
Output Connectors	BNC
Temperature Stability	0.01ppm (-30 to +70 deg C)
Voltage Stability	+/-0.005ppm per 5% change
Frequency Adjustment	Mechanical adjust via front panel
Adjustment Resolution	0.03ppm
Adjustment Range	>5ppm
Aging	0.003ppm per day
Dimensions	H = 158mm, W = 55mm , D = 274mm (excl handle)
Weight	<750g

ORDERING INFORMATION (HSO)

T801-20-0000	Paging HSO module
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ORDERING INFORMATION (Selected Complementary Products)

T837-20-1021	Integrated VHF paging exciter with external ref. option
T800-37-0000	Modem / delay board for use with T837-20-1021 only
T800-32-0000	Paging modulator (for use with UHF / 900MHz exciters)
T839-20-1020	100W VHF power amplifier
T855-20-0000	Typical UHF link receiver
T808-10-0000	25A 100/220VAC PSU
T800-28-0000	Paging rack for use with above Tait products

Tait Electronics reserves the right to update and amend these specifications without notice