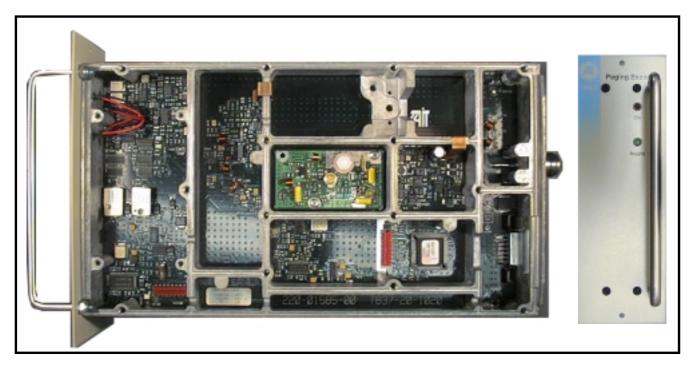


## NEW PRODUCT ANNOUNCEMENT **T837-20-102x VHF Paging**

## **Exciters**



## **OVERVIEW**

The T837-20-102x are price-competitive VHF paging exciters intended for data-only operation up to pocsag 2400bps or Flex<sup>TM</sup> 1600 bps data rates

The -1020 is a 1ppm stability variant intended for single-site applications or multi-site sequenced paging applications. The -1021 enables simulcast operation, by providing an external high stability reference drive port on the rear, for connection with the Tait T801-20-0000 paging high stability oscillator (0.01ppm), or most other high stability references.

Both units also make provision for an internal 1200bps asynchronous modem and digital delay line option board (T800-37-000) to be easily fitted.

A paging-specific T800 rack backplane and the modular design of the T800 Series II RF products enables flexible system topologies. Thus, the product is suitable for use in either satellite-linked or single/multi-hop RF-linked paging systems.

The -102x exciters leverage Tait Electronics' 30 year heritage in the wireless industry, and use field-proven designs, extensive surface mount technology and die-cast aluminium frames to ensure years of reliable paging even in the most hostile environments.

In summary, these new exciter products complement the existing Tait paging product portfolio, thereby allowing Tait to provide a **complete** paging network between the paging terminal and the pager.

-

TM Flex is a registered Motorola Trademark

**BENEFITS and OPERATIONAL FEATURES** 

**Integrated Design** Early generation paging exciters used plug-in paging modulators in a

standard FM exciter. In the -102x products, the data modulation

circuitry is integrated onto the main radio board.

**Cost Competitive** 

**Functionality** 

As many paging markets are mature and cost-competitive, the -102x products contain no unnecessary 'extra' features. They simply provide reliable paging functionality for the cost-conscious network operator.

**Quick Installation** Modular plug-in design reduces system configuration time.

Reliability Extensive smd technology and high quality components.

Flexible Turnkey

Solution

Using complementary products (modem/delay, HSO, link Rx, link Tx, PA, rack), complete single-vendor solutions can be easily configured.

Programming is via PGM800Win software (similar to other T800 RF **Simple Operation** 

products). Front panel led indicators for supply and keyed conditions.

## **TECHNICAL SPECIFICATIONS**

**Operating Frequency** 148-174 MHz

**Number of Channels** 127

Modulation 2 -level FSK, +/- 4.5kHz deviation

**Paging Formats** Pocsag 512, 1200, 2400, Flex 1600

**Data Input Levels** RS232 or TTL

**Supply Voltage** 10-16 Vdc, 13V8 nominal

**Supply Current** 

< 650mA (-1020), < 650mA (-1021) **Transmit** < 140mA (-1020), < 200mA (-1021) Standby

**Stability** +/-1ppm -20 to +70 deg C (-1020)

Determined by external reference (-1021)

**Output Impedance** 50Ohms, type N connector

**Operating Temperature** -30 to +60 deg C

Attack Time<sup>1</sup> <100msec Data Rise Time<sup>2</sup> <150 usec **Adjacent Channel Power** <-71dBc

**Module Dimensions** Height 191mm, width 60mm, length 316mm

800mW +/- 200mW **RF Power Output** 

**EMC Compatibility** See footnote 3

Type Approvals<sup>3</sup> China RRC GB/T 15938

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

Measured from Tx key to -3dB of nominal output power

<sup>&</sup>lt;sup>2</sup> Measured from 10% to 90% voltage level of demodulated data

<sup>&</sup>lt;sup>3</sup> The equipment is designed to comply with all relevant standards when installed in a typical configuration with standard T800 radio and power supply modules. Please refer to Tait Electronics for non-standard equipment configurations and regarding actual compliance status in the particular country of installation.

ORDERING INFORMATION (Exciters)	
T837-20-1020	VHF Paging exciter 25kHz bandwidth, 1ppm stability
T837-21-1021	VHF Paging exciter external reference

ORDERING INFORMATION (Complementary Products)	
T800-37-0000	1200bps asynchronous modem and digital delay line for T837-20-102x
T801-20-0000	0.01ppm high stability oscillator module for use with T837-20-1021
T839-20-1020	100W VHF power amplifier
T855-20-0000	Typical UHF link receiver
T856-20-0000	Typical UHF link transmitter
T808-10-0000	25A 100/220VAC PSU
T800-28-0000	Paging rack for use with above Tait products. Inter-module connections via T800-55-0000 pcb backplane