

Affordable • Compact • High Speed Data

**TB7100** base station/repeater

The renowned RF performance of Tait radio infrastructure is now even more affordable through the new TB7100 base station/repeater.

A proven RF platform is at the core of the cost-effective TB7100, which offers continuous duty operation at 25W, 40W (UHF) and 50W (VHF) power output. With two fans for effective cooling it can operate at ambient temperatures of up to 60°C (140°F).

The TB7100 is also an ideal high speed data platform, with data rates up to 19.2kbps.

With an optional internal AC power supply, the TB7100 is a complete system level solution. Conveniently compact, the base station/repeater comes in a 19-inch 1U rack bin, which can also be wall-mounted.

Fitted with an optional internal duplexer, the TB7100 is capable of full duplex operation for either a voice or data channel.



## TB7100 Specifications\*

### General

<b>Basic Description</b>	1U Base Station/Repeater
<b>System Compatibility</b>	Conventional FM, MPT 1327 Trunked, Data Systems

RF	Transmitter Power Output	
<b>Frequency Range</b>	66-88MHz	25W
	136-174MHz	25W, 50W
	174-225MHz	25W
	216-266MHz	25W
	350-400MHz	40W
	400-470MHz	25W, 40W
	450-520MHz	25W, 40W
<b>Frequency Stability</b>	±1.5ppm	
<b>Number of Channels</b>	100	
<b>Channel Spacing</b>	12.5/20/25kHz	
<b>System Types</b>	Full Duplex Voice TTR & LCB 1200 FFSK, 12K NB, 19K2 WB, THSD	
<b>Data Types</b>	FFSK, Tait High Speed Data	
<b>Operational Data Modes</b>	Transparent Mode	
<b>Sensitivity</b>	-116dBm (typical)	
<b>Selectivity</b>	68dB/73dB/75dB (NB/MB/WB)	
<b>Intermodulation</b>	<b>25W:</b> 70dB	<b>40/50W:</b> 75dB (typical)
<b>Ultimate Signal to Noise</b>	40dB/41dB/43dB (NB/MB/WB)	
<b>Tx Hum &amp; Noise</b>	-35dB/-39dB/-41dB (NB/MB/WB)	

Audio	Input	Output
<b>Audio Input Types</b>	600Ω Balanced Unbalanced Microphone	600Ω Balanced Unbalanced Monitor Speaker
<b>Audio Interface Level</b> (for nominal 60% deviation)	Balanced -20 to +3dBm Unbalanced 220µV-3Vpp	Balanced -20 to +3dBm Unbalanced 220µV-3Vpp
<b>Audio Line Distortion (@ -70dBm)</b>	≤3%	≤3%

### Environmental

<b>Operating Temperature</b>	<b>25W:</b> -30°C to +60°C (-22°F to +140°F) @ 100% duty cycle <b>40/50W:</b> -30°C to +50°C (-22°F to +122°F) @ 100% duty cycle
------------------------------	---

Supply Requirements	10.5-16VDC	
<b>DC Current</b>	<b>25W TB7100</b>	<b>40W TB7100</b>
Low Power Tx	3.1A (5W)	4.9A (15W)
High Power Tx	6.3A (25W)	8.2A (40W)
Rx (2W Speaker Output)	540mA	540mA
Rx Muted	280mA	280mA

<b>Dimensions (WxDxH)</b>	483mm x 400mm x 43.5mm (19" x 15.7" x 1.8") 1U Rack Space
<b>Weight</b>	6kg (13.2lb)

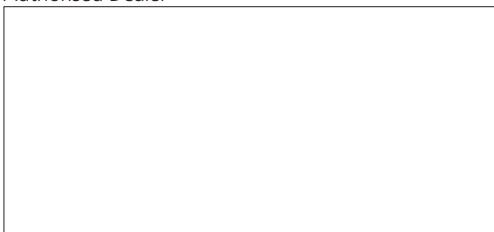
### Options

- Internal AC PSU (99-264 VAC)
- External T809-10 PSU (88-264 VAC)
- Internal Duplexer
- Wall Mount Bracket
- Microphone

\*All specifications are for 400-470MHz model

**Please note: not all frequency bands and power outputs are available in all markets.**

Authorised Dealer



Tait is your complete supplier of radio communications equipment with mobile, portable and infrastructure solutions. Tait is renowned for its flexibility, responsiveness and commitment to producing innovative world-class mobile radio communications products.

Specifications are subject to change without notice and shall not form part of any contract. They are issued for guidance purposes only. For further information please check with your nearest Tait office or authorised dealer.

The word Tait and the Tait logo are trademarks of Tait Electronics Ltd. Tait is an ISO9001: 2000 and ISO14001: 2004 certified supplier.