

## TSFLite VHF/UHF BASE STATION







TSF Lite provides TSF Base Station quality at highly competitive price where only local audio is required.

- Variable 1 25W power
- 1U height, x 19" base stations,
- Internal Power Supply Standard
- High environmental specification (-25C to +55C)
- Transmit Duty Cycle 100%, Full duplex
- Rack or wall mounted
- Microsoft Windows based Programming Tool
- DSP controlled, fully programmable
- PMR frequency bands covered (66-520MHZ)
- In-built loudspeaker for audio monitoring
- 37-way Facilities socket with programmable pin functions
- 4 wire local audio from facilities socket
- Local Encode/Decode, CTCSS, DCS and Selcall
- Transmission Timers
- Supports SRM9030 control head and engineering handset





## **SPECIFICATIONS**

1. General

Channel Bandwidth 12.5kHz(11K0F3EJN), 20kHz(14K0F3EJN) or 25kHz (16K0F3EJN) selectable

per channel

Modulation Freq. F3E (voice) pre-emphasised/flat, or FFSK data (1200 or 2400bps)

E0: 66-88MHz AC:136-174MHz K1\* 174-208MHz

Frequency Bands KM\*: 208-245MHz R1:335-375MHz R3\*: 335-400MHz TU:400-480MHz UW:440-520 MHz \* Subject to availability

Stability ± 2.0ppm

Temperature -25C to +55C Operating (Full Spec.) -40C to +80C Storage

Antenna Connect  $2 \times 50\Omega$  female N-type

Environmental IP20 ingress protection, Humidity <95% non-condensing

Engineer's handset (RJ45 - front panel)

Inputs/Outputs Programmable facilities connector (37 way D-type)

Power connector (5 Pin, 25 D-shell)

Supply Voltage 10.8 to 16.2V DC negative earth (13.65V nominal)

CE Type approvals to R&TTE Directive 1999/05/EC:

Type Approval EN300-086 Radio, EN300-113 Data, EN301-489-05 EMC, EN300-219 Sig.

EN60950 safety, TBR15 and 17-line, FCC and AS/NZ

Dimensions 44mm(1U) High x 437mm Wide x 450mm Deep (Excluding cables and ears)

~ (In Wall Mount) 125mm High x 465mm Wide x 470mm Deep

Power Requirement 100V AC/230V AC Mains or 12V DC/24V DC (nominal) for 25W

Weight 6.95 kg

## 2. Transmitter

Transmit Power 1W to 25W, selectable per channel

Tx Current Consumption

Typical: 25W:5.7A (20C; no Engineer's Handset)

Max: 25W:8.85A (fans & audio on max plus Engineer's Handset)

Duty Cycle 100%

Audio Distortion <5% at 1kHz, 60% deviation

Audio Frequency Response +1dB to – 3dB of pre-emphasised 300 to 3000Hz on 25kHz channel, 300 to

2550Hz on 12.5kHz channel

Intermodulation >40dB or >70dB attenuation with Internal Isolator option (TSF-ISOLATOR).

Hum and Noise >40dB (12.5kHz), 45dB (25kHz)

Transmit Rise Time <25mS

## 3. Receiver

Voice:≥12dB SINAD for 0.3µV<sub>pd</sub> for 12.5kHz chan.

Sensitivity Data: typical FFSK performance for <10-2 BER (<20%MER):  $0.3\mu V_{pd} - 1200$  baud in 12.5kHz & 1200/2400 baud in 25 kHz,

0.3μV<sub>pd</sub> – 1200 baud in 12.5kHz & 1200/2400 baud in 25 kHz, 0.5μV<sub>pd</sub> – 2400 baud in 12.5kHz channel. [Ref: EN300-113-1:9.1]

Typical: 1.0A (20C; no Engineers Handset)

Rx Current Consumption

Max: 1.55A (fans & audio on max plus Engineers Handset)

Selectivity >73dB (25kHz), >63dB (12.5kHz)
Intermodulation >70dB attenuation (ETSI method)

Audio Response ±3dB of de-emphasised 300Hz to 2.55kHz for 12.5kHz chan with CTCSS

Audio Output 2Wrms internal monitor speaker

Distortion <5%

Blocking >95dB at ±1Mhz Hum and Noise >40dB (12.5kHz)





Note:
Typical figures based
on normal operating
conditions. Not all
combinations of frequency
bands and options are
available for every market
area.

For additional information on this or any other Team Simoco product, visit our web site at:

www.teamsimoco.com

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