

## GENERAL DESCRIPTION

The DTO/Synthesizer module is a compact, broadband frequency source, covering the frequency range of 0.5 to 2.0 GHz. The unit features frequency settling times below 1 uSec, while the ovenized internal VCO's assures repeatability under ambient temperature conditions.

## KEY FEATURES

- Fast Tuning
- Low Post Tuning Drift
- Low Spurious
- Heaters for Temperature Stabilization
- Heater Power Control Switch
- Compact Size
- Chain Connection Option
- Revers and Transient Protection
- Latched Data Option

## APPLICATIONS

- RF Sources
- Radar Simulators
- EW Simulators
- Built-In Testers

## GENERAL SPECIFICATIONS

Frequency Range	0.5 - 2.0 GHz
RF Output Power	+13 dBm +/- 2 dB
RF Power Variations	+/- 1 dBm
Output Impedance	50 Ohm
Load VSWR	1.5:1 Max
Harmonics	-20 dBc
Spurious	-60 dBc
Power Requirements	+15 VDC/1.7 A, Max -15 VDC/350 mA, Max 28 VDC/3A for Heaters
Operating Temp.	0 to 50 <sup>o</sup> C
Non Operating Temp.	-40 to 80 <sup>o</sup> C
Humidity	95% No Condensation
Connectors	D-37 – Data, Control D-25 – Power SMA – Outputs

Size	186 X 115 X 50 (mm)
Tuning Control	12 bits
Internal Band selection	5 bits
Frequency Resolution	<600 KHz
Accuracy	<1 MHz
Frequency Settling time 1 MHz (in 1 uSec)	
Post Tuning Drift in 30 sec	1.5 MHz
Frequency Pulling	+/-100 KHz Max
Frequency Pushing	+/-200 KHz/V Max
Phase Noise	@10 KHz -54 dBc/Hz @100 KHz -80 dBc/Hz @1 MHz -103 dBc/Hz

**Note:** Specifications are subject to change without notice.



3 Ha'Yozma St.  
P.O. Box 2023  
Tirat Carmel, 39120  
Israel

Tel: +972 (0)4 857-7490  
Fax: +972 (0)4 858-0534  
Email: [marketing@microkim.com](mailto:marketing@microkim.com)  
Website: [www.microkim.com](http://www.microkim.com)