

K-DT1 RADAR Doppler Target

Product Information

Features

- Handheld K-Band Doppler Target Simulator
- Battery Operation
- Programmable Speed Range 1 ... 200km/h
- Programmable Movement Direction
- Programmable Signal Time
- 3 Programmable Presets
- Standalone or Hosted Operation
- USB Interface to Host Computer
- Compact and Rugged Construction
- DT1-Remote PC Software included



Applications

- Mobile Test Equipments
- Production Final Inspection
- Incoming Components Inspection
- System Tuning and Adjustment

Description

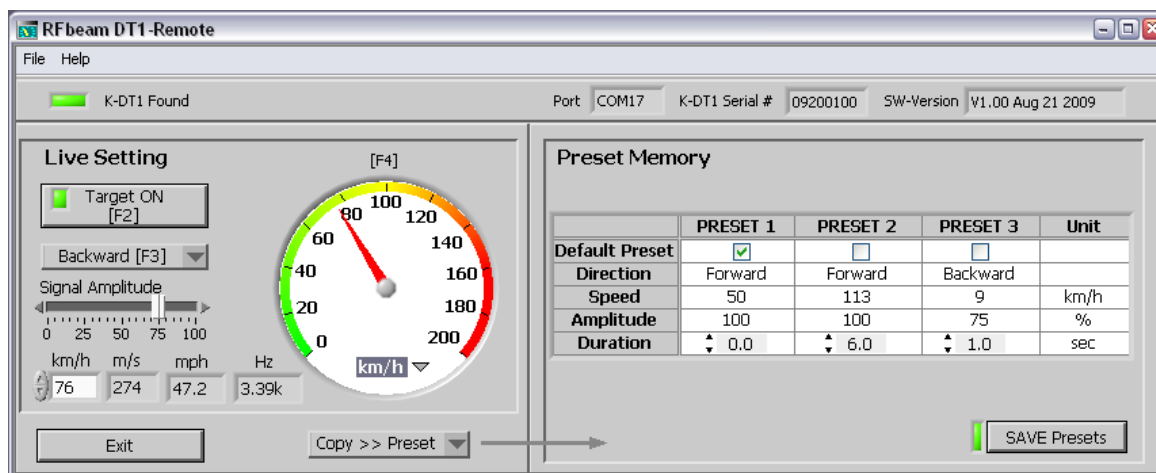
K-DT1 is a portable moving target simulator for K-band Radar transceivers. It can be used for calibrating and testing speed displays, door openers, safety systems and other radar based Doppler sensors. K-DT1 uses a circular polarized antenna. You can use K-DT1 in any

orientation independently of the sensor orientation.

A software generated modulation signal allows generation of low distortion and directional Doppler signals from 44Hz to 9kHz corresponding to speeds from 1km/h to 200km/h.

Configuration Software

K-DT1 may be connected via USB to any Windows PC. The included DT1-Remote software allows realtime remote controlling and configuring the presets of the K-DT1.



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Characteristics

Parameter	Conditions / Notes	Symbol	Min	Typ	Max	Unit
Operating conditions						
Supply voltage	Battery	V_{ccBatt}	3.6	6	7	V
	USB	V_{ccUSB}	4.5	5	5.5	V
Supply current	Operating	I_{cc}		340		mA
	Standby	I_{cc0}		50		uA
Battery Lifetime	Daily use 50 seconds, Alkaline cells	T_{op}		1		Year
Operating temperature	non condensing	T_{op}	0		+60	°C
Storage temperature		T_{st}	-20		+80	°C
Doppler Simulator						
Frequency range	Transmit frequency of UUT	f_{TG}	24.000		24.250	GHz
Doppler frequency range	Digitally adjustable	$f_{Doppler}$	44		8800	Hz
Simulated speed range	Digitally adjustable	$V_{Doppler}$	1		200	km/h
Output power range	Adjustable simulated object distance	P_{out}	1		100	%
Antenna gain				14		dBi
Antenna polarization	Right hand circular polarized			RHCP		
Overall gain	For circular polarized trancivers			38		dB
	For linear polarized trancivers			32		dB
Out of band spurious					-30	dBm
Aequivalent reflectivity	For circular polarized trancivers	RCS_{circ}		800		cm ²
	For linear polarized trancivers	RCS_{in}		200		cm ²
Host Interface						
USB	Serial USB, Mini-USB connector					
Body						
Outline Dimensions				68x128x24		mm ³
Weight	Including batteries			185		g
Accessories						
Case protection, Softcase, USB Cable, USB Memory Stick, 4 AA-size Alkaline Cells, Windows Software "DT-1 Remote"						

Ordering Information

Part #: RFbeam K-DT1

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