



WTX Test Transmitter Family

Handheld CW & WCDMA Test Transmitters up 3.0 GHz



- 0.5 dB Accuracy
- 300 to 3000 MHz Wireless Bands in a single unit
- WCDMA 3GPP Scanners Compatible
- Allows Noise / Carrier Pollution Test
- CW and / or WCDMA Modes

- Power Amplifiers up 25 Watts
- Light Weight < 0.7 Kgm
- Friendly User Interface
- Memory Channels
- Key-word Upgradeable



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The Need for Real Measurements

Mobile operators are always in need to deliver greater capacity while keeping minimum financial and technical risks in the roll out of their mobile networks while maintaining the quality of service target set.

More accurate Cell planning and optimization are big arms in fulfilling the A.M. needs. Moreover, the problem of choosing the optimum locations in an In-Building communications system is quite different; where the factors affecting optimum selection are non-uniform service area in complex propagation environment, mutual coverage and interference of multiple base stations.

The cost and network complexity of IBS communications systems is strongly dependent on the number of access nodes required to achieve the operator's service objectives. There is consequently a strong incentive to employ system planning tools and planning aids which can be used to minimize the number and optimize the locations of the system access nodes.

Consultix

Provides here the right planning aid through the WTX family of RF test transmitters generating signals in CW (Continuous Wave) or modulated forms covering the entire frequency band from 300 MHz to 3.0GHz.

The tool is magnificently accurate, lightweight, and compact, operated with friendly man-machine-interface, modular in design, S/W upgradeable to save user's investments and enhance user's logistics cycle.

The WTX Family comes in several versions:

- WTX-05 provides CW & WCDMA operation covering all UMTS bands with the capability to generate CPICH, SCH, and PCCPCH channels.
- WTX-35A provides CW signals from 300 MHz to 3.0 GHz
- WTX-35B provides 4 port simultaneous CW signals from 400 MHz to 2700 MHz





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Professional User Requirements



Light Weight & Handheld

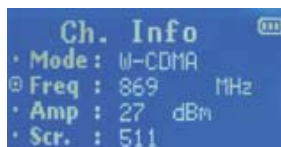
The need for a small size handheld transmitter is due to the need for easy fixation on a mast or tower, faster mission accomplishment, health care about employees and low ability to field accidents.



Ergonomic

Ergonomic construction & user friendly interface allow for convenience of the user, and prevents from frequent mistakes especially when users have low experience level.

Accuracy is always a key factor to ensure proper modeling procedures, hence, more accurate access nodes distribution.



WCDMA signal allows testing noise/carrier pollution to measure the effect of outside cells on the indoor scrambling codes.

Versatility & Upgradeability are important aspects to save user investments allowing extending the device features and capabilities to cope with future applications, needs, and technologies.

Applications

- CW Measurements
- Walk-Tests
- IBS Path Loss Measurements
- DAS Performance Evaluation
- In-Building Coverage Enhancement
- General Purpose Signal Generator

Who needs it?

- Mobile Operators
- Telecom Integrators
- Telecom Vendors
- Sub-Contractors
- Tower Site Providers
- Infrastructure Providers



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Specifications & Ordering Information

Specifications:	WTX -05	WTX -35-A	WTX -35-B
RF Characteristics			
Number of RF Ports	1	1	4
Internal Frequency Accuracy	2 ppm. (typ. 1 ppm)		
Frequency Ranges (Selected as per Ordering Information below)	2.6GHz, 2.4 GHz, 2.1 GHz, 1.9 GHz, 1.8 GHz, 900 MHz, 850 MHz, or 700MHz selections	300 MHz to 3.0 GHz or 2.6 GHz, 2.4 GHz, 2.1 GHz, 1.9 GHz, 1.8 GHz, 900 MHz, 850 MHz, or 700MHz selections	400 MHz to 2700 MHz, or 2.6 GHz, 2.4 GHz, 2.1 GHz, 1.9 GHz, 1.8 GHz, 900 MHz, 850 MHz, or 700MHz selections
Number of Bands per unit	Single or Tri-Band	Single or Wide-band	Wide-band
Frequency Step	100 KHz	1 KHz	100 KHz
Modulation	CW or 3GPP WCDMA	CW (Single Carrier)	CW (Single Carrier)
3G UMTS Channels	CPICH, SCH, & PCCPCH	N.A.	N.A.
Min. Output Power (at RF port)	-10 dBm		
Max. Output Power WCDMA & CW (at RF port)	20 dBm @ 2.1 GHz 15 dBm @ 850 MHz, and 900 MHz bands, 11 dBm @ other bands	20 dBm	15dBm @ 400 MHz to 1900 MHz 10dBm @ 1900 MHz to 2700 MHz
Power Accuracy	±1 dB (typ±0.5 dB)		
Off Transmit Power	-100 dBm		
Non-Harmonic spurious	<-40 dBc @ 10dBm output		
Scrambling Code	0 to 511	N.A.	
RF output	50 ohm SMA Female		
Power supply			
Input Power	9 to 14 VDC		
Power Consumption	<14Watts	<7 Watts	<14 Watts
Charger	220V AC, 50 Hz.		
DC Input	Power Jack 2.1 mm ID 5.5mm OD		
Battery operation time (At continuous maximum output power)	105 minutes (Field exchangeable battery)	>3 Hours	105 minutes (Field exchangeable battery)
Physical			
External Dimensions	L179 x W80 x H43mm		
Weight	< 700gm incl. battery		
Operating Temp	-10 to +40 C		
Standard Package	Transmitter, AC Charger, Duck antenna, Soft Case, and User Manual.		Transmitter, AC Charger, Soft Case, and User Manual.

Ordering information	
Single-band WCDMA/CW Transmitter (See available bands above)	WTX-05-xx *
Tri-Band WCDMA/CW Transmitter (See available bands above)	WTX-05-xxxxxx *
Single-band CW Transmitter (See available bands above)	WTX-35-Axx *
Wide-band CW Transmitter; 300 to 3000 MH	WTX-35-A4
4 port, Wide-band Transmitter; 400 MHz to 2700 MHz (See available bands above)	WTX-35-B4
10 Watt Power Amplifier; 500 to 2700 MHz (Others available)	PA-5027-40
Ruggedized Carrying Case (for any WTX Model)	WTX-05-RC
3m RF cable (SMA Male to SMA Male)	WTX-05-CSS
7 dBi directional panel antenna (limited Bands)	WTX-05-PA7
External battery pack (for up to 8 hours operation)	WTX-05-BP
4.5 dBi Omni-directional duck antenna (limited Bands)	WTX-05-DA4
Car charger	WTX-05-CC
Tripod 160 cm (63 in.), Folds down to 64 cm (25 in.) (for any WTX Model)	WTX-05-2T (custom mounting plate included)

*xx= 26, 25, 21, 19, 18, 09, 08, 07, or 04 for the above specified bands respectively. (Others available)