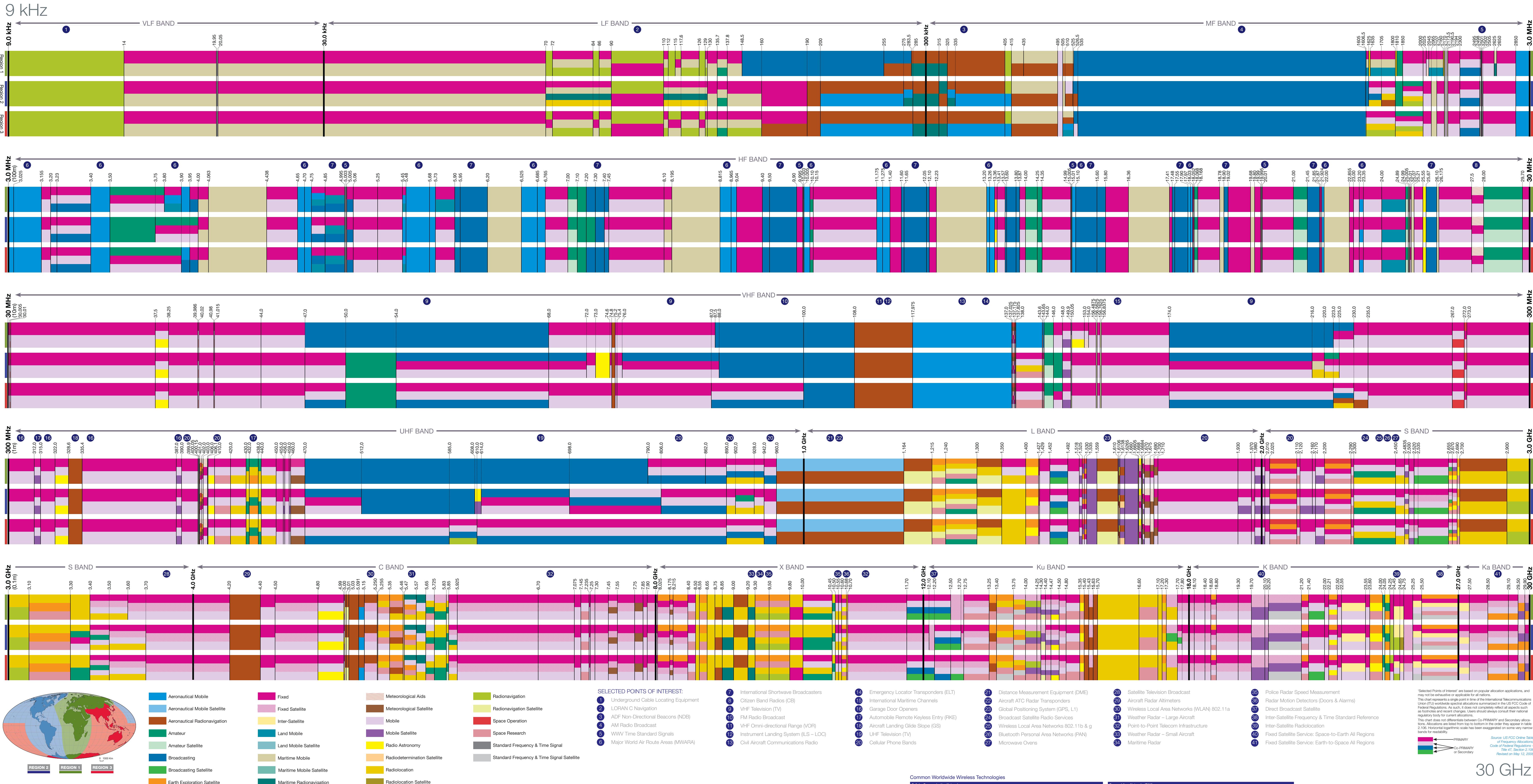


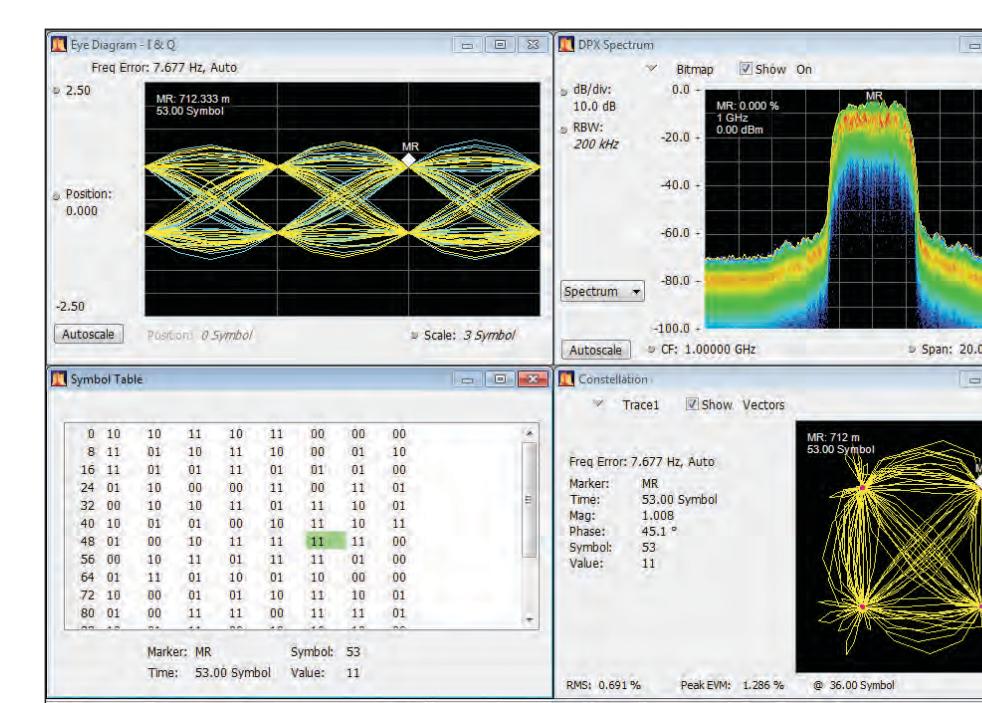
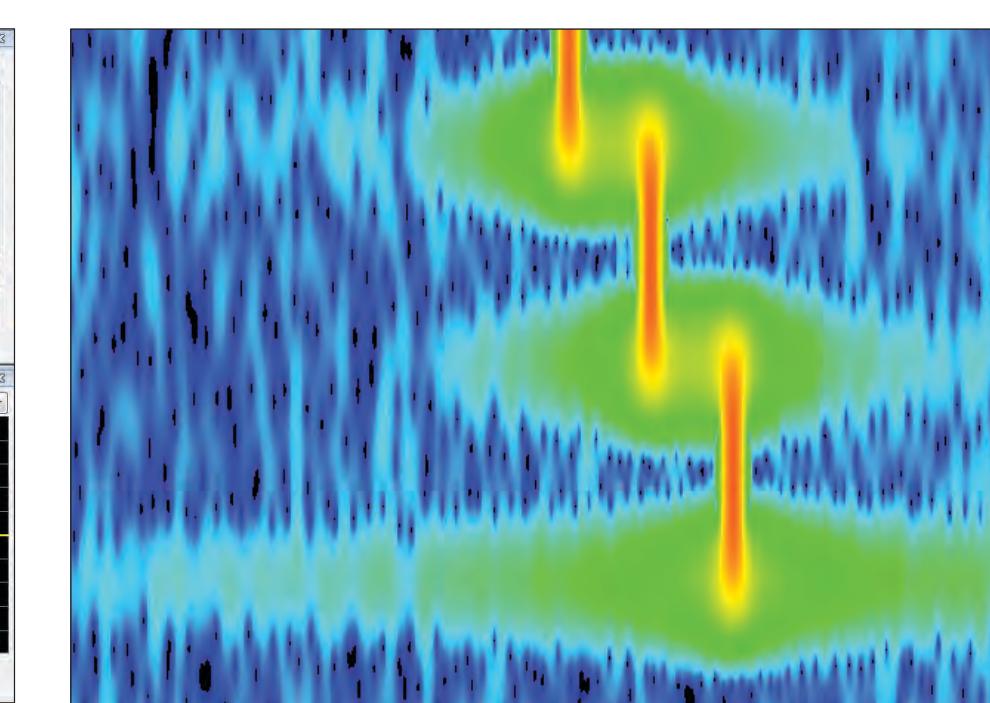
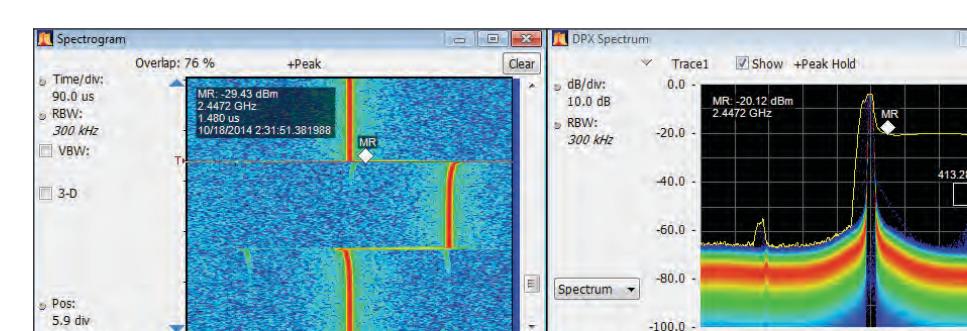
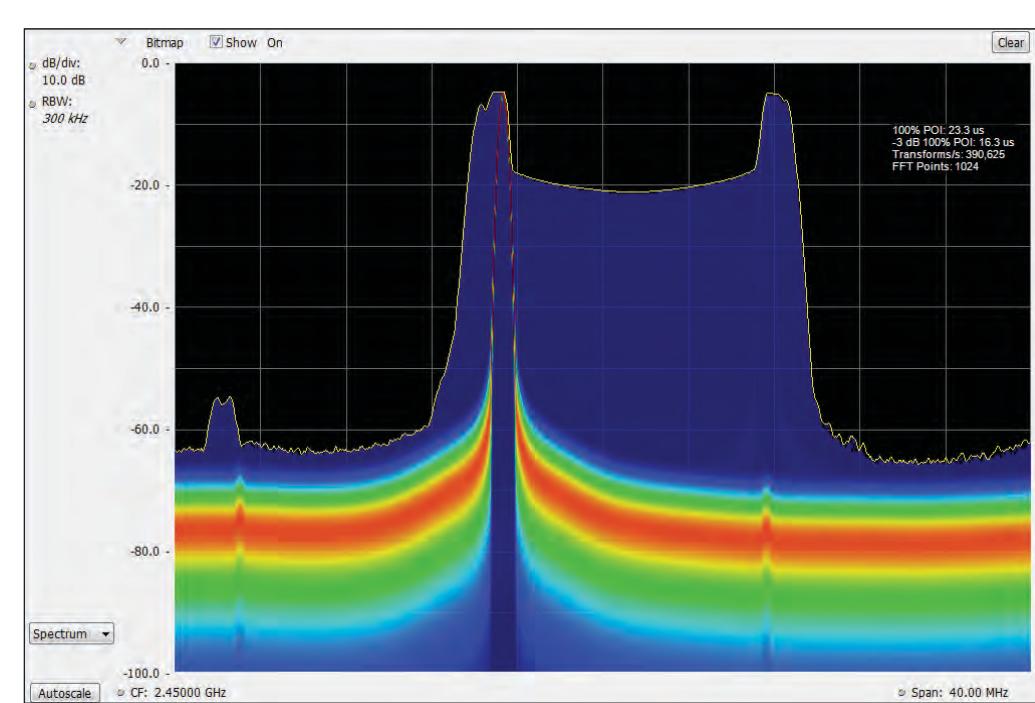
Worldwide Spectrum Allocations Courtesy of Tektronix



Tektronix Real-Time Spectrum Analyzers

Discover much more

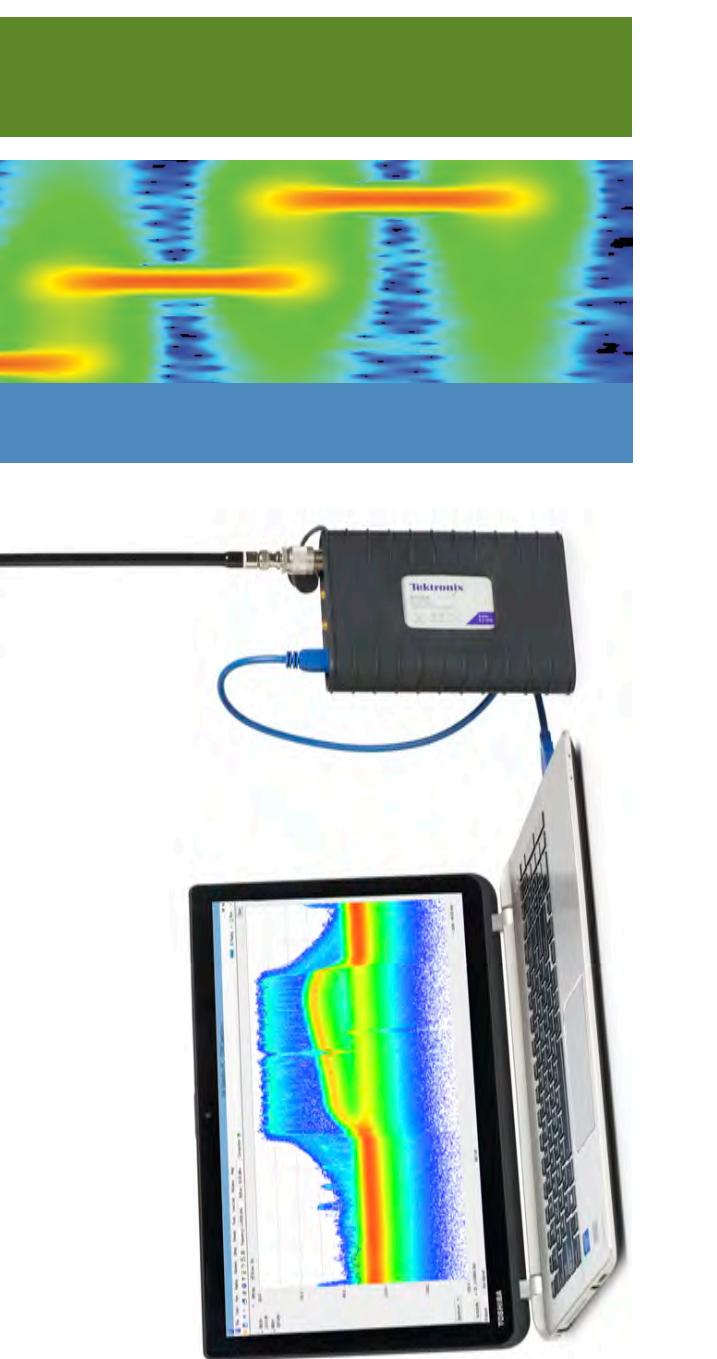
Trigger on frequency changes



Tektronix Real-Time Spectrum Analyzers: Solving your RF challenges from the bench to the field

Common Worldwide Wireless Technologies			
Cellular Communication Networks			
TECHNOLOGY	CHANNEL SPACING	COMMON FREQUENCIES	REGIONS
LTE-FDD	1.4 MHz 3 MHz 5 MHz 10 MHz 15 MHz 20 MHz	LSMH A/B/C/D/E, USMH C/D: 700 MHz 800 MHz (EUDD / SMR) 850 MHz (CLR/ECLR) 900 MHz (E-GSM) 1500 MHz (UL/PDC) 1600 MHz (L-Band) 1700 MHz (AWS) 1800 MHz (DCS) 1900 MHz (PCS / EPCS) 2000 MHz (S-Band) 2100 MHz (IMT) 2600 MHz (IMT-E)	Regions 2 & 3 Worldwide Regions 2 & 3 Regions 1 & 3 Japan USA Region 2 and Japan Worldwide except N. Amer. Region 2 USA Regions 1 & 3 Worldwide
		700 MHz	Asia
		1900 MHz (PCS)	Region 2
		1990 MHz	China
		2100 MHz (IMT)	Europe / Asia / Oceania
		2300 MHz	Worldwide except N. Amer.
		2500 MHz (BRS/EBS)	N. America / Asia
		2600 MHz (IMT-E)	Worldwide except Oceania and N. America
		3500 MHz	Worldwide except Africa and Oceania
		3700 MHz	Europe
		GSM 900: 890-915 MHz (UL); 935-960 MHz (DL)	Regions 1 & 3 except Japan and Korea
		DCS 1800: 1710-1785 MHz (UL); 1805-1880 MHz (DL)	Regions 1 & 3 except Japan, Korea and China
		GSM 850: 824-849 MHz (UL); 869-894 MHz (DL)	Region 2 – Americas
		PCS 1900: 1850-1910 MHz (UL); 1930-1990 MHz (DL)	Region 2 – Americas
		Band I: 1920-1980 MHz (UL); 2110-2170 MHz (DL)	Regions 1 & 3
W-CDMA/HSDPA/ HSUPA	5 MHz	Band V: 824-849 MHz (UL); 869-894 MHz (DL)	Region 2 – Americas
		Band II: 1850-1910 MHz (UL); 1930-1990 MHz (DL)	Region 2 – Americas
		800/850 MHz band: 824-849 MHz (MS); 869-894 MHz (BS)	Region 2 & 3 – Primarily Americas, Korea, China
		Japan Cellular band: 887-925 MHz (MS); 832-870 MHz (BS)	Region 3 – Japan
		PCS 1900: 1850-1910 MHz (MS); 1930-1990 MHz (BS)	Region 2 – Americas
CDMAOne/ CDMA2000®/1xEV-DO	1.25 MHz	IMT 2000 band: 1920-1980 MHz (MS); 2110-2170 MHz (BS)	Region 3 – Japan and China
		CDMAOne System (IS-95A/B/C) CDMA2000® (1xRTT – Radio Transmission Technology)/1xEV-DO (1x Evolution-Data Only High Rate Packet Data)	
Personal Area Networks (PAN)			
TECHNOLOGY	CHANNEL SPACING	COMMON FREQUENCIES	REGIONS
IEEE 802.15.4a (Zigbee)	2 MHz (915 MHz) 5 MHz (2.40 GHz) 500 MHz-1355 MHz	250-750 MHz 784, 868, 915 MHz 2.40 GHz (ISM band) 3.10-4.80 GHz; 6.00-10.60 GHz	Worldwide
IEEE 802.11ad (WiGig)	2 GHz	60 GHz (ISM band)	Worldwide
ANT	1 MHz	2.4 GHz (ISM band)	Worldwide
IEEE 802.15.1 (Bluetooth)	1 MHz (hopping)	2.4 GHz (ISM band)	Worldwide
Local Area Networks (LAN)			
TECHNOLOGY	CHANNEL SPACING	COMMON FREQUENCIES	REGIONS
IEEE 802.11 a/b/g/n Wireless Local Area Network	a/b/g: 10 MHz (overlapped) 20, 25 or 30 MHz (non overlapped) n: 20 or 40 MHz p: 5, 10, or 20 MHz ac: 20, 40, 80, or 160 MHz	b/g: 2400-2483.50 MHz a: 4900-5825 MHz (various) n: 2400-2483.50 MHz; 5150-5825 MHz (various) p: 5850-5925 MHz (various) ac: 2400-2483.5 MHz (USA), 2400-2500 MHz (Japan), 5150-5845 (various)	Worldwide





Worldwide Spectrum Allocations
Courtesy of Tektronix (2014)

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Egypt 010 3751 4855
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Republique of Korea 02 2317 5000
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Spain 900 2230 4855
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* If the European phone number above is not acceptable, please call +41 52 675 3777
Contact last updated June 2013
For Further Information
Tektronix reserves a complimentary, one-on-one consultation with a representative that is not previously published material. Specification sheets, application notes, and other technical documents are available online at www.tektronix.com.
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