
GLOSSARY OF TECHNICAL TERMS

“active module”	A radio frequency module which amplifies and changes the frequencies of radio frequency signals and requires external power to operate. Examples include repeaters, trunk amplifiers, tower amplifiers and base station amplifiers
“base station”	The radio part of a cellular radio transmission site. A single base station usually contains several radio transmitters, receivers, control sections and power supplies. Base stations are sometimes called a land station or a cell site
“base station controller (BSC)”	A combination of device and software used by a base station to register call setup, call termination or transfer the cellular phone transmission from within a cell to an adjacent cell
“Code Division Multiple Access (CDMA)”	A system that allows multiple users to share one or more radio channels for service by adding a unique code to each data signal that is being sent to and from each of the radio transceivers. These codes are used to spread the data signal to a bandwidth much wider than is necessary to transmit the data signal without the code
“Code Division Multiple Access 2000 (CDMA2000)”	CDMA2000 is an evolved version of the CDMA system that uses wider bandwidth radio channels and enhanced packet transmission protocols to provide for advanced high-speed data services. The CDMA2000 system uses multiples of the standard radio channels. These multiples are 3, 6, 9 or 12 times the standard 1.25 MHz wide bandwidth. These wider bandwidths allow for user data transmission rates of up to 2 megabits per second
“combiner”	A device that is used to combine several channels onto a common transmission line or antenna system
“coupler”	A device that is used to transfer signal from one transmission medium to another transmission medium. A coupler may also be used to insert a signal from one transmission line to another transmission line
“dBi”	Decibel isotropic — the measurement of the forward gain of an antenna compared to a fictitious isotropic antenna, which uniformly distributes energy in all directions
“duplexer”	A combined filter device that permits a transmitter and receiver to share the same antenna assembly by using filters with different frequency bands. The use of a duplexer prevents transmitter power output to the antenna from transferring to sensitive receiver assembly
“fiber optic converter module”	A self-contained assembly of devices that changes one set of codes, modes, sequences or frequencies to a different set via optically transparent fiber through which light can be transmitted by successive internal reflections, installed as a unit

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“filter”	A device that selectively transmits signals having certain properties (often, a particular range of wavelengths/frequencies), while blocking the remainder
“frequency band”	A section of the radio frequency spectrum defining a certain number of adjacent frequencies
“Gigahertz (GHz)”	One billion cycles per second, a measurement unit for frequency
“GPS”	Global Positioning System
“Global System For Mobile Communications (GSM)”	A digital cellular telephone system that originated in Europe and is now available in most parts of the world. The GSM system uses 200 kHz wide channels that are divided into frames that hold 8 time slots
“integrated module”	A collection of distinct elements or self-contained components that have been built into one single package
“ISO”	International Organization for Standardization
“ITU”	International Telecommunication Union
“Megahertz (MHz)”	One million cycles per second, a measurement unit for frequency
“passive module”	A radio frequency module that filters, combines and splits radio frequency signals. Examples include filters, duplexers, multifre-quency splitters and combiners
“Personal HandyPhone System (PHS)”	A lightweight portable wireless telephone that functions as a cordless phone in the home and as a mobile phone elsewhere
“power amplifier”	A device that amplifies and re-transmits signals, without significantly altering any characteristics of the incoming signal other than its amplitude
“radio frequency” or “RF”	Those frequencies of the electromagnetic spectrum normally associated with radio wave propagation. RF sometimes is defined as transmission at any frequency at which coherent electromagnetic energy radiation is possible
“receiver”	The portion of the communication system that includes a detector and signal processing electronics to convert electrical signals (electric waves) to audio or data signals. It provides reception and, if necessary, demodulation of electronic signals
“repeater”	An electronic device that receives a weak or low-level signal and retransmits it at a higher level or higher power, so that the signal can cover longer distances without degradation
“RoHS”	Directive on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment 2002/95/EC

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“second generation (2G)”	A term commonly used to describe the second technology used in a specific application or industry. In cellular telecommunications, 2G systems use digital radio technology with advanced messaging and data capabilities
“third generation (3G)”	A term commonly used to describe the third generation of technology used in a specific application or industry. In cellular telecommunications, third generation systems use wideband digital radio technology as compared to 2G narrowband digital radio
“Time Division Synchronous Code Division Multiple Access (TD-SCDMA)”	A 3G mobile standard developed in the PRC and approved by the International Telecommunication Union
“tower mount amplifier”	A device that uses a small amount of energy to control a larger amount of energy through the part of a transmission line that holds the conductors in place and off the ground
“transducer”	A device or substance that converts one type of energy to another for various purposes including measurement or information transfer
“trunk amplifier”	A device that uses a small amount of energy to control a larger amount of energy through a circuit between switchboards or other switching equipment
“UCS”	Universal Certification Service Co., Ltd.
“Wideband Code Division Multiple Access (W-CDMA)”	A 3G digital cellular system that uses radio channels and has a wider bandwidth than 2G digital cellular systems
“WiFi”	Wireless fidelity — a type of WLAN
“WiMax”	A standard for fixed broadband wireless metropolitan access networks that use point-to-multipoint architecture
“WLAN”	Wireless local-area network