



TRC-421/E Transportable Radio Communication System



DESCRIPTION

High capacity transportable radio communication systems are considered specially for transmitting high capacity information from tactical areas to operational commander levels. Whereas the communication services including single-channel communication equipment operated in tactical zones do not meet needs of brigades and divisions in operational areas, usually high capacity point-to-point transportable radio communication systems are benefited from higher level communication services.

zTRC-421/E provides capability of establishing full duplex telephone communication, exchanging data/image with maximum capacity of 8Mbps in the UHF frequency range. In case that the capacity is used only for telephone communication, 128 subscribers can make high quality call. All of the exchanged information including voice, data, and image are encrypted by an advanced encryption unit, before being exchanged. Due to network interfaces, the two LAN networks available in both sides can be connected to each other via this transportable radio communication system. Frequency range of the TRC-421/E is a wide range of 225~400 MHz specified proportionate to distance of the two points, terrain, and exact operational frequency. In addition to operating the radio as a point-to-point radio, it can be used as a repeater for increasing communication distance.



General specifications	
Modulator & demodulator	QPSK
Data transmission rate	1E1, 2E1, 4E1
Input traffic type	E1, Ethernet
	O.W supervisor channel with the rate of 64Kbps
Operating status	1+0
Input voltage of the system	28VDC/220VAC
Maximum gain of the system	130dB
Transmitter specifications	
Transmitting power	1.4W/10W/20W in manual status 28±15dBm in automatic status
Harmonic rejection	45dB
DC current consumption	5A
Receiver specifications	
Receiving sensitivity	nominal -87dBm (1E1@BER=10-6)
Dynamic range	55dB@4E1
Image frequency rejection	60dB
IF	70MHz
Antenna specifications	
Frequency band	200~400 MHz
Polarization	vertical & horizontal
Antenna gain	9.5dBi
Antenna beam width	about 28°
Connector type	N type
Physical & environmental specifications	
Dimension	19 inch-5U
Weight	less than 65kg
Operating temperature	-20°C ~ +60°C
Environmental standard	MIL-STD-810F