EX-MP7XXX
(TACTICAL VIDEO COMMUNICATION SYSTEM)
(TVCS)

INFORMATION

EXICOM EX-MP7XXX : A Single & Four channel manpack tactical video communication system has a wide range of application in defence , homeland security, law enforcement, disaster response, intelligence surveillance and reconnaissance (ISR), and live media broadcasting. Exicom uses COFDM modulation to enable reliable operation in difficult terrain & challenging environment, superior range and performance provided by a combination of forward error correction (FEC), frequency diversity, antenna diversity and video compression. Reliable operation in difficult terrain & challenging environment. EX-MP7XXX is designed to withstand operation in harsh conditions like desert heat to arctic cold, providing secure and highly dependable service over short and long radio paths.

COMPETITIVE ADVANTAGES

- Ease of Operation "No frastructure Required "
- Non-Line of Sight (NLOS) Video On The Move
- Designed in India

APPLICATIONS

- Mobile Video Transmission & Video Broadcast
- Monitoring and Surveillance
- Law-Enforcement, Military & Border Security

HIGH PERFORMANCE & FEATURES

- HD & SD digital video processing
- Video and Audio " On The Move "
- COFDM for Enhanced NLOS Ranges
- Bidirectional Audio Support (Optional)
- NLOS Ranges up to 2.5Km

- Secure End to End Encryption
- Ultra Low latency
- IP Streaming
- Narrowband Modulation for Extended Range
- Diversity Receiver for Reliable & Quality reception

TACTICAL VIDEO COMMUNICATION SYSTEM

TRANSMITTER

- ManPack
- Vehicle Mount
- Ship Mount
- Repeater

RECEIVER

- Suitcase Type Receiver (1/4 CH)
- 19" Rack Mount Receiver
- Tri-band Receiver Stackable
- Handheld Receiver
- 2/4/8 Diversity Recevier

STANDARD SPECIFICATION

DESCRIPTION	TECHNICAL PARAMETERS		
Frequency*	UHF (300-470 MHz)	L Band (Low) (1140-1150 MHz)	
Modulation	COFDM (Coded Orthogonal Frequency Division Multiplexing)		
Constellation	BPSK / QPSK / 16QAM / 64QAM		
RF Channel Bandwidth	Ultra Narrow Band (UNB) 625kHz	Narow Band (NB) 1.25 & 2.5MHz	DVBT 6, 7, 8 MHZ
GUI (Guard Interval)	1/4, 1/8, 1/16, 1/32		
C/N	>28dB @32dBm		
VIDEO			
Input Format	PAL, NTSC (with or without pedestal) 720 x 576i 50Hz, 720 x 480i 59Hz		
Compression / Decompression	H.264 / AVC / MPEG4 Part 10 High Profile Level 4.0		
ASP Compression	ASP / MPEG4 Part 2 with NB Mod.		
Coding Options	Horizontal Scaling of 3/4, 2/3, 1/2, 1/4	Vertical Scaling of 1/2, 1/4	
	Sub-frame rate of 1/2, 1/4, 1/8, 1/24		
Frame Rate	Full / Half / Quoter / Eighth (MPEG4 Only)		
Encoding / Decoding Delay	1s to 22ms / 22ms to 1s (Mode Dependant)		
Encoding / Decoding bitrates	0.25Mbps to 32Mbps		
INTERFACE TRANSMITTER			
Audio / Video	SD: Composite [RCA / BNC]	HD: HDMI [Mini / Micro]	
Audio Out	3.5mm / 6mm Jack		
Control	RS 232 [1k2 to 115k, 7/8 bit, no/ odd/ even parity]		
Universal	USB (Optional)		
Remote Control	RS 232 & USB Control from PC GUI appliccation or other device software		
Radio	N Type [Female] [Video / Audio] TNC [Female] [Audio RX]		
Power	3 Pin Round Rugged Connector		
RECEIVER			
Audio / Video	SD: Composite [RCA / BNC]	HD: HDMI [Mini / Micro]	
Audio IN	3.5mm / 6mm Jack		
Control	RS 232 [1k2 to 115k, 7/8 bit, no/ odd/ even parity]		
Radio	2xN Type [Female] [Video / Audio] UHF connector [Female] [Audio Tx]		
Universal	USB		
Network	10/100 BaseT & WiFi 802.11n *(Optional)		
ENCRYPTION			
Licensable	AES-128 Bit (Advance Encryption Standard) AES-256 Bit (Advance Encryption Standard)		

Continued..

STANDARD SPECIFICATION

DESCRIPTION	TECHNICAL PARAMETERS		
TRANSMITTER			
Power	500mW / 1W / 2W / 5W		
Channel Spacing	125 kHz		
FEC	NB: 1/3, 2/3		DVB-T: 1/2, 2/3, 3/4, 5/6, 7/8
Display	Build-in front panel display control		
RECEIVER			
Diversity	2/4/8 way diversity options available (To maximum radio combining for fade and multipath elimination)		
RF Sensitivity	-102 dBm Single Antenna @ 625kHz -106 dBm Two-Diversity @ 625kHz		
RF Lock Time	1-2 second		
Display	Build front panel display control		
Screen	14 / 15" (LCD)		
Storage	32 GB (Standard) Up to 4 TB (Optional)		
Recording	Supported		
Playback	Onward features available		
Streaming	IP Interface Streaming	RTSP: Multicast / Unicast	UDP: Multicast / Unicast
Encryption Transport Stream	AES-128		
Diagnostic Tools	Link Analysis/ Spectrum Operating Frequency/ Channel Bandwidth		
Control & Configuration	GUI, Software & Controller		
AUDIO			
Frequency	470.5-479.950 MHZ		
RF Sensitivity	≤ -100 dBm		
Modulation	GFSK		
MANAGEMENT SOFTWARE			
MANAGEMENT SOFTWARE	Transmitter,Receiver, Playback, Command & Control software**		
POWER			
AC Input	230VAC (RX)		
DC Input	12VDC (TX, RX)		
Consumption	2AMP(TX), 3.5 AMP (RX) Bidirectional Audio		
Capacity	14.8V (12Ah) TX / 14.8V (15.6Ah) RX		
POWER, MECHANICAL AND ENVIRONMENTAL			
Temp.	Ops.:- -40°C to 65°C (TX) / -40°C to 65°C (RX)		Stg.:- -45°C to 70°C (TX) / -45°C to 70°C (RX)
Protection	Dustproof and rainproof		
Weight	Transmitter 2.5Kg(Without battery & Harness)	Receiver Portable 12Kg	Battery 2Kg Each (TX) / 2Kg (RX)

\#   Frequency range would be from 100-200 MHz only
*   Options
**   Licensed Options

EXICOM

EXCELLENCE IN COMMUNICATION

Rev 1.3

Note: Exicom is constantly seeking to improve quality and performance. Therefore Specifications, Configurations and Processes are subject to change without notice.