



**MV2000TBH/MV2025TBH**  
**Backpack Transmitter**



**MV2025RJ7**  
**Rack Mountable Receiver**

### **Introduction:**

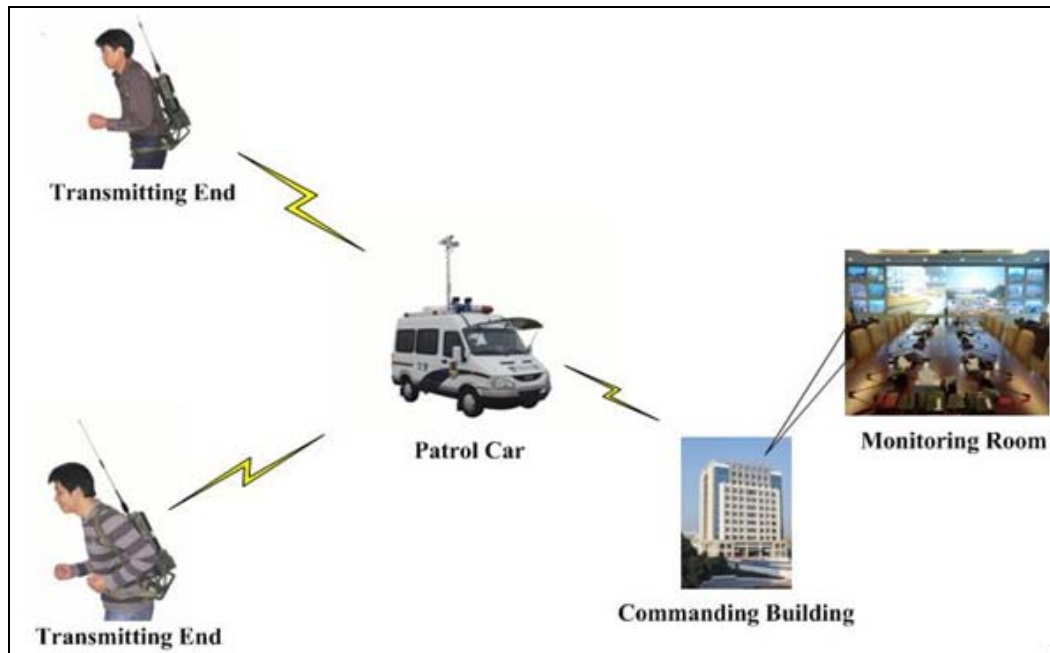
The Knapsack Digital Wireless Video Transmitter adopts the latest technologies of COFDM modulation and MPEG-2 image compression that enables good NLOS (Non line-of-sight) transmission with DVD quality video. The transmitter is compact size with power amplifier for longer-range transmission. This system has been widely used in many fields such as: Police Forces, First Responders, Security Services, Fire Services, Port Security, Homeland Security, Traffic Management, Police Technical Support Units, Special Forces, Military Command and Control Posts, Airport, Border Control, Major Incident Support.

### **Features:**

- COFDM modulation, Stable transmission
- MPEG-2 video compression, DVD video quality
- Lithium battery for power supply
- Mobile and NLOS(Non line-of-sight) transmission
- Great security by encryption of AES 128 bit/ALLTECH Basic Scrambling
- Low system latency
- Modular design, compact structure, small cubage
- Several wavebands available: VHF/L/ S
- Strong casing with built-in cooling plates, waterproof and shockproof
- In LOS (line-of-sight)environment, the transmission range is up to 80km

### **Product Application**

The Knapsack Digital Wireless Video Transmission system is the ideal solution for first responders or military personnel entering hazardous environments. The first responder can carry the equipment on the back to enter accident ground and then the transmitter send the camera's digital, compressed signals to the commanding center.



## Transmitter Specification

Modulation	COFDM
DC Input	DC12.5V~DC16.8V
Working Current	≤3.8A/DC12.5V
RS232 Control Interface	Standard RS232 level, 9600, 8, N, 1
RS232 Data Interface	Standard RS232 level, supporting 1200~115200
Constellation	QPSK, 16QAM, 64QAM (optional)
FEC	1/2, 2/3, 3/4, 5/6, 7/8 (optional)
Guard Interval	1/32, 1/16, 1/8, 1/4 (optional)
Bandwidth	MV2000TBH: 6/7/8MHz; MV2025TBH :1.25/2.5MHz, 6/7/8MHz (optional)
A/V Interface	BNC / RCA
Frequency	325MHz-399MHz,400-500MHz (customized),
	560MHz-760MHz,760MHz-860MHz (customized),
	1.0-1.4GHz (customized) ,2.3-2.5GHz (customized)
	Frequency is adjustable continuously
Encryption	AES 128 bit / ALLTECH Basic scrambling
	RS232 serial port for configuration
Flatness	≤2dB (within full frequency range );
	≤0.5dB (within 8MHz)
Carrier	2K
Power Output	27-33dBm (adjustable) in 1dB step
CNR	≥-30dB @ 30dBm power output



Second Harmonic	≤-43dB
Video Signal	1Vp-p@75Ω, PAL
CBER	<2.0E-4
Video Compression	MPEG-2 4:2:0 /MPEG-4 (optional)
Resolution	720x576 @ 8MHz, 352x288 @ 1.25MHz
Battery	14.8V / 8.2AH
Frame Weight	1.1 kg
Casing Protection	IP66 (dustproof, waterproof)
Video Rate	500Kbps--15Mbps(MAX)
Dimension	238mm*140mm*78.5mm
Weight	2.7kg

### Receiver Specification

Rx Frequency	170~860MHz VHF & UHF
Bandwidth	6/7/8MHz, 2.5/1.25MHz (optional)
RF Level Input	-92dBm~-20dBm / -105dBm~-20dBm
RF Impedance	50Ω
RF Interface	N female
Modulation	COFDM
Constellation	QPSK, 16QAM, 64QAM (optional)
FEC	1/2, 2/3, 3/4, 5/6,7/8 (optional)
Carrier	2K, 8K
Guard Interval	1/32, 1/16, 1/8, 1/4 (optional)
Video Decoding	ISO/IEC13818-2 MPEG-2MP@ML
Aspect Ratio	4:3, 16:9
Resolution	720x576 @ 8MHz, 352x288 @ 1.25MHz
Audio Output	Stereo unbalanced (300/200 mV)
AV Output	2 audio+ 2 video
Decryption	AES 128 bit / ALLTECH Basic scrambling
	RS232 serial port for configuration
Working Voltage	AC220V / DC12V
Temperature	-20°C~+50°C
Dimension	480mm*260mm*44mm (1U Aluminium alloy box)
Weight	3.5 kg