

# **Hytera Mesh Solution**



Industry Challenge Isolated Area

Multi-Media Data

Harsh Environment

Limited Time

**Limited Resources** 

**Move Frequently** 

Rapid LTE Solution



#### Video/Voice

- Full/half-Duplex Private Call
- Group Call
- Emergency Call
- Video Push/Pull

#### Data

- Point to Point SDS/MMS
- Point to Multipoint SDS/MMS
- Status Message

#### Dispatch

- Dynamic Group
- Broadcast Call
- Visualized Dispatch
- · GIS locating & tracing

# Highlights

#### **Fast Deployment**

 Service pre-configured, power on and ready to go

# Wide coverage

- Long range link: 10km per link
- Short range link: 1km per link

#### **Mobile Connection**

• Stable Mobile link at 120km/h

#### High throughput

- 30Mbps @ 10MHz bandwidth
- 15 concurrent H265 FHD streams

#### Reliability & Robust

• IP67 Design / MIL-STD-810G

#### **High Security**

- AES 128/256
- 3rd party E-to-E encryption



# Public Security

On the field, Mesh can coverage the special area and provide communication service and help commander control the field person and vehicle.

### Disaster Rescue

In disasters such as earthquakes and floods, the public network may fail. The Mesh system can provide emergency communications for first responder.

#### Firefighting

The Mesh can quickly provide a broadband communication in big building or forest, with HD camera can make commander catch video and control the scene.

## Military Scouting

With ad-hoc network, Mesh can give broadband link between command post and battlefield, scout will send back all the collection information.

# VIP Escorting

Mobile communication ability support a all time broadband communication, make sure the VIP are in the monitoring.

# **Applications**

#### iMesh-3800V iMesh Vehicle Node



The iMesh-3800V vehicle node features fast deployment, flexible networking, and easy operation. The iMesh-3800V is typically mounted on the pole to provide critical transmission links for long-distance and large-capacity communication.

Item	Specifictions	
Dimensions	330mm×240mm×114mm	
Weight	7.5Kg	
IP rating	IP67	
Power consumption	<75W, 45W	
Operating temperature	-40°C ~ +65°C	
Frequency	320MHz-344MHz, 542MHz-582MHz	
TX power	2*5W	
Adjust step size	1dBm	
Bandwidth	10MHz, customizable	
RX sensitivity	≤-105dBm@10MHz	
Antenna configuration	2T2R (MIMO)	
Power interface	+12V ~ +24V DC	
Nodes	8	

# iMesh-3800P iMesh Backpacked Node



The iMesh-3800P backpacked node is easy to use and carry and supports flexible networking. With typical manpack deployment, the iMesh-3800P can provide critical transmission links for long-distance and large-capacity communications.

Item	Specifictions	
Dimensions	266mm×206mm×87mm	
Weight	5kg(battery)	
IP rating	IP67	
Power consumption	20W(Typ.)	
Operating temperature	-40°C ~ +65°C	
Frequency	320MHz-344MHz, 542MHz-582MHz	
TX power	2*2W	
Adjust step size	1dBm	
Bandwidth	10MHz , customizable	
RX sensitivity	≤-105dBm@10MHz	
Antenna configuration	2T2R MIMO	
Power interface	+12V DC	
Network interface	RJ45*2 (LAN1&LAN2)	
GNSS interface	SMA	
Nodes	8	

## **PNE380 Multi-mode Mesh Radio**



PNE380 frees up valuable space and weight for extreme portability. Configured with multi-band, PNE380 has the outstanding anti-jamming ability by auto frequency selection. It supports both mesh and cellular modes for improved flexibility, and can be widely applied to a variety of mission-critical scenarios.

Item	Specifictions		
Frequency	340MHz/580MHz, 1.4G		
RF channel	U: 1T1R;		
	L: 1T2R		
Transmit power	0.5W(type), 0.75W(MAX)		
Sensitivity	U: ≤-99dBm @ 10MHz		
	L: ≤-102dBm @ 10MHz		
Bandwidth	10MHz, 3MHz, customizable		
Throughput	30Mbps(10MHz)		
Interactive plan	OLED display		
Dimensions	137.5 mm×60 mm×27.8mm		
Weight	350g		
Peripheral interface	WiFi, BlueTooth, USB, HDMI, GE		
Battery capacity	Standard: 2400 mAh(7.4V)		
Power consumption	3.5W(typ.)		
Operating temperature	-20°C ~ +55°C		
Working humidity	5%RH~100%RH		
IP rating	IP67		

# **Rugged Laptop-e-Center**



E-center is an on-site command and dispatching center. The three-screen design integrates command and control, map and video surveillance to provide the most comprehensive information as possible in a visual way. It also supports multiple links to interconnect and cooperate with the rear command center. E-center can be used as the on-site command center in various emergencies such as fire fighting, flood, earthquake and typhoon etc.

Item	Specifictions	
Battery voltage	Reted 14.8V	
Charge time	2h 80%, 3h 100%	
Operating time	4 hours	
CPU	Intel i7-6600U, dual core 4threads,	
	2.6GHz, RAM 24G, hard disk 1T	
LCD	1920×1080, 15.6-inch, 3 pieces	
Dimensionss	48.5×35.6×16cm(L×W×D)	
Weight/kg	15kg(including battery)	
Operating temperature	-10°C to +50°C	
Port	HDMI(Maximum 1920×1080,1 way);	
	Usb3.0(4 pieces)	
SIM card holder	Standard SIM card	
WAN port	10/100M	
LAN port	100/1000M	
PoE	802.3af PoE, 4ways, a single way up to 25W	

# **Body Worn Camera VM780**





- On-site Real-time Video & Audio Streaming
- H.265 Video Compression Technology
- 216° Rotatable Camera
- Audio Group Call

- Long Battery Life
- Reliable & Rugged Design
- High Security Data
- Loud Audio

	Item	Specifictions	
	memory	RAM: 2GB; storage: 16GB/32GB/64GB/128GB	
General	Dimensions(H×W×D)	114.5mm×61mm×25.5mm	
	Weight (including battery)	<195g (2500mAh), <205g (3500mAh)	
camera	Field of View	Diagonal 116°, horizontal 101°, vertical 57°	
	Battery Life	8 hours@1080P video shooting	
L-44	(continuous video shooting)		
battery	Battery Capacity	2500mAh/3500mAh	
	Charging Time	<4 hours	
Display	Size	2.8-inch	
Display	Resolution	240*320 QVGA	
	Video Format	mp4 (1080P@30FPS, 720P@30/60FPS, 480P@30FPS)	
Recording	Video Encoding	H.264/H.265	
Audio	Speaker Power	1.5 Watt*2	
Audio	Microphone	Dual microphones	
	WI-FI	802.11 b/g/n	
conncetion	BT	BT4.2	
	Connector	Micro USB port, 4-pin contact port	
	Ingress Protection	IP68	
Environmental	Drop Resistance	2 m	
Specification	Operating Temperature	-30°C to +60°C	
	Certification	MIL-STD-81 OG, CE, FCC, IC	
Night Vision	IR Lamp	OSRAM*6	
	Night Vision Range	<10m	
Positioning	Satellite Positioning	GPS/BDS/GLONASS/AGPS	
Network	3G/4G (Nano SIM Card)	Asia-Pacific & Africa: GSM: 850/900/1800/1900 TD-SCOMA: B34/B39 CDMA:BCO WCDMA: B1/B3/B5/B8 TDD-LTE: B38/B39/B40/B41 FDD-LTE: B1/B3/B5/B7/B8/ B26/B28	Europe: GSM: 850/900/1800/1900 TD-SCOMA: B34/839 CDMA:BCO WCDMA: B1/B3/B5/B8 TDD-LTE: B31/B3/B5/B7 /B8/ B20/B26/B28a America: GSM: 850/1900 WCDMA: 82/84/85 TDD-LTE: 838/840/841 FDD-LTE: 838/840/841 FDD-LTE: 82/84/85/87/812/ 813/817 /826/827



## **Hytera Communications Corporation Limited**

Stock Code: 002583.SZ

**Address:** Hytera Tower, Hi-Tech Industrial Park North, 9108# Beihuan Road, Nanshan District, Shenzhen, P.R.C









Hytera retains right to change the product design and specification. Should any printing mistake occur, Hytera doesn't bear relevant responsibility. Little difference between real product and product indicated by printing materials will occur by printing reason.