Hytera E-pack is intended for fast and flexible communication system deployment. The E-pack can not only be used as a radio to make and receive calls, it also can create a wireless mobile ad hoc network to route voice. As Hytera IP (Intellectual Patent), one E-pack function as a radio, repeater and mesh node with one frequency, highly saving frequency resources. With light, small and IP67 design, the E-pack can be installed in a vehicle, carried by a backpack, pole-mounted, or wall-mounted fairly suitable for temporary communication or indoor coverage.
**Wireless Mobile Ad Hoc Networking**

Hytera E-pack can create a wireless mobile ad hoc network, in which there are maximum 32 nodes. The ad hoc network is self-configuring and dynamic in which E-pack nodes are free to move.

**Fast Deployment**

Based on wireless mobile ad hoc networking, Hytera E-pack is capable of creating and joining networks to deploy the communication system as soon as it is powered on.

**Flexible and Reliable Networking**

**Multiple Networking Topologies**

AT Communication ©

E-pack supports versatile topologies, for example chain, tree, star and so on, so as to provide wider coverage.

![Network Diagrams](image)

**Highly Reliable Networking**

If one E-pack node moves away from the network or malfunctions, voice will automatically route to another E-pack node in order to guarantee link continuity.
High Spectrum Efficiency

Based on TOMA and FDMA technology, one frequency can be used to make calls and route voice at the same time, greatly saving frequency resources.

Reliable Quality

Hytera E-pack is strictly compliant with MIL-STD-810 C/D/E/F/G standards and water and dust proof rating is up to IP67, ensuring outstanding performance even under harsh environments.

GSM Link as Backup

With an embedded GSM card, if an E-pack node is away from the network it can make a call via public network to any E-pack node on the network. This ensures radios within its coverage can communicate with radios on the network.
Caller Location Display

Radios within each E-pack node of the ad hoc network can check the location of caller including distance and azimuth angle

Application
Blind Area Coverage

Due to the high output power of the E-pack communications will not be affected by the topology of the area, different floors or obstacles etc

Typical Application

In high buildings, the signal is poor due to space propagation loss and penetration loss. Using E-pack, smooth communication between basement and the building roof can be achieved
Temporary Communication Coverage

E-pack features fast and flexible networking. For emergency cases or outdoor operations which need a temporary communication system, E-pack can better solve this problem.

Typical Application

For military or police, when there is field operation, it is a must to build a temporary communication system. Hytera E-pack builds up a temporary communication network, and provides soldiers or policemen at different location with smooth communication.
### Accessories

- Palm Microphone
- Battery
- Adapter
- Antenna
- Backpack

### Specifications

**General**

- **Rated Voltage**: DC 14.8V
- **Protocol**: DMRTierII
- **Input Voltage**: 90-264VAC 50Hz/12-36VDC
- **Battery Capacity**: 185WH
- **Charging Time**: Rapid charge 2h 80%; 3h fully charged
- **Battery Life**: About 10 hours (15-85 dutycycle)
- **Networking Capacity**: 32
- **Operating Bandwidth**: 25KHz
- **Channel Spacing**: 12.5k
- **Vocoder Type**: AMBE++/NVOC
- **Frequency Stability**: ±0.5ppm
- **American Military Standard**: MIL-STD-810 C/D/E/F/G
- **Dust & Water Intrusion**: IP67
- **Antenna Impedance**: 50Ω
- **Dimensions (LxWxD)**: 295X187X68 mm
- **Weight**: 3.6Kg (with battery)
<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>TTFF (Time to First Fix) Cold Start</td>
<td>&lt; 1 minute (first time)</td>
</tr>
<tr>
<td>TTFF (Time to First Fix) Hot Start</td>
<td>&lt; 10s (first time)</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-40°C to +85°C</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-30°C to +60°C</td>
</tr>
<tr>
<td><strong>Receiver</strong></td>
<td></td>
</tr>
<tr>
<td>Sensitivity</td>
<td>-120 dBm</td>
</tr>
<tr>
<td>Intermodulation</td>
<td>≥70 dB</td>
</tr>
<tr>
<td>Spurious Response Rejection</td>
<td>≥70 dB</td>
</tr>
<tr>
<td>Blocking</td>
<td>≥84 dB</td>
</tr>
<tr>
<td>Conducted Spurious Emission</td>
<td>Antenna Port: 9kHz to 1GHz ≤ -57 dBm, Standby: 1GHz to 12.75GHz ≤ -47 dBm</td>
</tr>
<tr>
<td>Selectivity</td>
<td>ETSI: 60 dB @ 12.5KHz / 70 dB @ 25KHz</td>
</tr>
<tr>
<td>RF Power Output</td>
<td>350-400 MHz, 410-470 MHz: SW/10W/20W</td>
</tr>
<tr>
<td>Adjacent Channel Power</td>
<td>≥60 dB @ 2.5 KHz / ≥70 dB @ 25 KHz</td>
</tr>
</tbody>
</table>

E-Pack100 - Digital Wireless Ad Hoc Repeater