

An ATEX future for Ambulance



The development of ATmosphere EXplosive (ATEX) compliant TETRA radios – the industry standard that certifies devices as “intrinsically safe” to operate in hazardous areas where dust and explosion are risk factors – has seen significant growth in recent years. Indeed Motorola anticipates demand for ATEX TETRA radios to grow by approximately 20 per cent, writes Director (Business & Strategy Global TETRA) Heidi Hattendorf.



The design of Motorola’s ATEX handheld devices reflects the fundamental issues faced in these “warm zone” environments, such as the need for fast access to vital information, simple operation, extended battery life and high quality, reliable radios. It is vital emergency service personnel are equipped with the right device for the demanding and potentially dangerous situations they encounter. Motorola recently added the MTP850Ex portable TETRA terminal to its portfolio of ATEX radios based on this understanding. This device provides high quality communication with

wide-ranging user safety and class leading ATEX & IECEx specifications, allowing use when working in potentially hazardous environments.

The extremely robust MTP850Ex terminal endured a rigorous testing process to ensure superior quality and reliability under the most extreme circumstances. The ATEX TETRA terminals are designed to be intuitive and easy to use in challenging locations and include a host of state of the art features, including an integrated GPS receiver that can locate personnel, improving user safety and resource management, as well as an internal “man down” alert. It also has IP65 (Ingress Protection Code) certification due to the high level of protection it provides when operating in wet environments without having a harmful effect on its operation.

This internationally recognised standard is an industry first for a TETRA ATEX radio, which also offers high protection against explosive gas and dust. By understanding the end-user’s day-to-day needs and expectations, we develop “intrinsically safe” radios that provide intuitive, instinctive operation. In the UK, the ATEX MTP850Ex plays a crucial part in helping thousands of Hazardous Area Response Team (HART) personnel to complete important life-saving tasks by providing crystal clear, effective communication.

Looking to the future, what could make a considerable difference is the deployment of Tetra Enhanced Data Services (TEDS), which provides the same cost-efficient coverage as TETRA but with wideband data speeds. As an extension to the TETRA standard, it can be deployed as an upgrade to current systems. TEDS enables enhanced information access and data input across very wide areas.

Motorola recently restructured to meet the challenges that lie ahead and its new group, Enterprise Mobility Solutions, brings the knowledge of delivering mobile computing, networks, devices and applications to play in public safety.

Second nature technology

Motorola focusses on several core design themes to produce technology that is second nature:

- Devices are operated by a simple, rotary dial that provides fast and instinctive access to key applications. Voice calls are clear thanks to the integration of special microphones. And all buttons are large to ensure “gloveability”
- Safety features include clear emergency buttons to summon help and technology that senses when a user may have fallen, or stopped moving, so as to automatically generate an alarm in control rooms.
- Tough and portable: designed to weather the rough and tumble of the industrial workplace, devices are extremely tough and built to survive extremes of temperature.
- Radios must provide a broad range of accessories such as headsets, belt clips, earphones and one-touch microphones to enable users to select a set-up that provides optimum comfort as they fulfil their tasks.
- GPS capabilities provide another level of safeguards. For instance, if a user moves outside a pre-arranged safe boundary the alarm is automatically raised. GPS also provides an overview of operations to dispatch teams. Control officers can understand what personnel they have where, what skills and capabilities are available within those teams, and how resources can best be deployed.