



PENTAGON



ELVEY

Group

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Verticals

- Public Safety
- Public Transport
- Utilities
- Oil and Gas
- Airports and Seaports
- Industry
- Public Access
- Defence



TETRA

TETRA for Public Safety

TETRA is the preferred solution for public safety applications, offering much improved capacity, functionality and security. Distinctive TETRA features for the public safety sector include encryption, authentication and ambient listening. TETRA offers the highest voice and data capacity and throughput compared to other narrowband digital PMR standard. Only TETRA can guarantee the availability required for mission-critical communications.

Features of TetraNode for Public Safety customers

- Carrier-grade platform, ensuring the highest grade of availability
- Best-of-class RF base station and switching performance
- End-to-end encryption supported by dispatch and logging applications
- Comprehensive range of voice and data capabilities
- Excellent geographic component and link redundancy capabilities
- Open IP-based interfaces for integration of third-party applications

Benefits of TetraNode for Public Safety customers

- Highly secure communications and protection against cyber attacks
- Powerful, reliable and efficient dispatch operation
- Robust coverage with fewer TETRA base station sites
- Mission-critical reliability, exceeding 5-times-9 availability
- Seamless integration with broadband data networks and applications
- Lowest Total Cost of Ownership

TETRA for Public Transport

TETRA is the preferred solution for public transport applications, offering superior capacity, functionality and security, as well as great opportunities for increasing operational efficiency. The public address facility allows a dispatcher in a control room to make announcements to the passengers using the intercom system inside the train, and to send messages to on-board displays to show traffic information. The emergency call option enables the radio user on board to make a live connection to the control room in case of emergency situations, with one press of the button. communications.

Features of TetraNode for Public Transport customers

- Customised control room solutions for public transport operations
- Functional alias support on basis of person, vehicle, line and run number
- Dynamic capacity allocation for TETRA signalling, voice and data
- Open IP-based interfaces for integration of third-party applications
- Excellent geographic component and link redundancy capabilities
- Much improved functionality and performance compared to GSM-R networks

Benefits of TetraNode for Public Transport customers

- Powerful, reliable and efficient dispatch operations
- Integration with Traffic Management Systems
- Proven scalability with high capacity and performance
- Mission-critical reliability, exceeding 5-times-9 availability
- Seamless integration with broadband data networks and applications
- Lowest Total Cost of Ownership

TETRA for Utilities

Utilities cannot rely on commercially operated networks like 4G as these are fed by the energy network itself and can be overloaded during major incidents. A blackout of the energy network would therefore also affect the availability of cellular communications. With an independent network like TETRA this can be prevented. TETRA offers both feature-rich voice and robust data capabilities. Plus, TETRA terminals offer comprehensive voice and data capabilities, built-in GPS, SCADA interfaces and Radio User Assignment for use in business-critical environments.

Features of TetraNode for Utilities customers

- Comprehensive range of voice and data capabilities
- Best-of-class RF base station and switching performance
- Supports wide range of legacy and modern PBXs
- Dynamic capacity allocation for TETRA signalling, voice and data
- Open IP-based interfaces for integration of third-party applications
- Low energy consumption

Benefits of TetraNode for Utilities customers

- Highly secure communications and protection against cyber attacks
- Excellent capacity, reliability and scalability
- Robust coverage with fewer TETRA base station sites
- Ultimate platform for smart city and smart grid applications
- Seamless integration with broadband data networks and applications
- Lowest Total Cost of Ownership

TETRA for Oil & Gas

TETRA is the preferred mobile communications standard for Oil & Gas applications. TETRA-based solutions offer many benefits that help these companies to improve their operations and enhance staff safety. To name a few, the TETRA standard supports comprehensive voice and data capabilities, radios with built-in GPS, SCADA interfaces, Radio User Assignment (RUA) and explosion-proof (ATEX) radios for use in hazard areas.

Features of TetraNode for Oil & Gas customers

- Innovative safety-critical conference call capability
- Cabinet selection and wiring schemes according customer requirements
- Best-of-class RF base station and switching performance
- Supports wide range of legacy and modern PBXs
- Dynamic capacity allocation for TETRA signalling, voice and data
- Open IP-based interfaces for data-centric application development

Benefits of TetraNode for Oil & Gas customers

- Highly secure communications and protection against cyber attacks
- Excellent capacity, reliability, scalability and modularity
- Robust coverage with fewer TETRA base station sites
- Low barrier for maintenance by own personnel
- Seamless integration with broadband data networks and applications
- Lowest Total Cost of Ownership

TETRA for Airports and Seaports

TETRA leaves DMR far behind when it comes to data capacity and throughput, the number of data messages per second being four times higher. Powerful voice and data capabilities of TETRA include duplex voice calls and IP-packet data. Especially the availability of radios with built-in GPS, Radio User Assignment and intrinsically safe ATEX terminals is highly appreciated in the airport and seaport sectors. TETRA being an open standard and offering interoperability of system elements, customers can choose any mix of technologies, with full confidence that they will work together seamlessly.

Features of TetraNode for Airports and Seaports customers

- Comprehensive range of voice and data capabilities
- Supports wide range of legacy and modern PBXs
- Seamless group call operation from PBX
- Collective call and Radio User Assignment (functional alias) capabilities
- Excellent geographic component and link redundancy capabilities
- Open IP-based interfaces for integration of third-party applications

Benefits of TetraNode for Airports and Seaports customers

- Robust communications and protection against cyber attacks
- High capacity of up to 16 TETRA transceivers per site
- Mission-critical reliability, exceeding 5-times-9 availability
- Optimal communications to support operational processes
- Seamless integration with broadband data networks and applications
- Lowest Total Cost of Ownership

TETRA for Industry

Users benefit from all the increased functionality available from TETRA, including group calls, individual calls, priority calls, emergency calls (with pre-emption), scan groups, short data and status messages as standard. When it comes to data capacity and throughput, TETRA leaves DMR far behind. Especially the availability of radios with built-in GPS, Radio User Assignment as well as intrinsically safe ATEX terminals is much appreciated in the industry. And, of course, TETRA is a truly open standard bringing together technologies from around the world with seamless interoperability.

Features of TetraNode for Industry customers

- Comprehensive range of voice and data capabilities
- Easy to install, configure and deploy
- Best-of-class RF base station and switching performance
- Supports wide range of legacy and modern PBXs
- Modular and scalable, with support of full redundancy
- Open IP-based interfaces for integration of third-party applications

Benefits of TetraNode for Industry customers

- Robust communications and protection against cyber attacks
- Excellent capacity, reliability and scalability
- Powerful, reliable and efficient dispatch operations
- Robust coverage with fewer TETRA base station sites
- Seamless integration with broadband data networks and applications
- Lowest Total Cost of Ownership

TETRA for Public Access Mobile Radio

TETRA Public Access Mobile Radio network operators offer subscriptions for TETRA radio fleet owners. The users of these systems are usually not the same as the owner and operator of the system. TETRA offers superior coverage with fewer sites, instant group call setup, and radios that are fit-for-purpose in comparison with PTT over Cellular. Security and privacy are ensured by encryption, authentication and fleet partitioning.

Features of TetraNode for Public Access Mobile Radio customers

- Comprehensive range of voice and data capabilities
- Best-of-class RF base station and switching performance
- Support of high-capacity SIP and E1 trunks
- Full-duplex and group call operation from PBX with support of MS-ISDN
- Open IP-based interfaces for integration of third-party applications
- Extensive capabilities for fleet partitioning and profiles to aid operator services

Benefits of TetraNode for Public Access Mobile Radio customers

- Highly secure communications and protection against cyber attacks
- Excellent capacity, reliability, scalability and modularity
- Robust coverage with fewer TETRA base station sites
- Availability of applications to report on statistics and SLA compliance
- Low barrier for maintenance by own personnel
- Lowest Total Cost of Ownership

TETRA for Defence

The mission-critical architecture of the TETRA system makes TETRA the answer to the challenging military market. Unlike country or supplier-specific solutions, TETRA is an open standard, meaning that terminals and infrastructures of different suppliers can be used seamlessly together. This allows for competitive, interoperable COTS solutions. For obvious reasons, the encryption and authentication capabilities of TETRA are a key advantage for the military market.

Features of TetraNode for Defence customers

- Truly portable and shock-resistant solution
- Extensive use of COTS hardware, open-source software and open interfaces
- End-to-end encryption supported by dispatch and logging applications
- Patented solution for efficient communication over high-delay satellite links
- NATO-compliant call pre-emption
- Open IP-based interfaces for integration of third-party applications

Benefits of TetraNode for Defence customers

- Fast to install and deploy – typically between 2 and 5 minutes
- Highly secure communications and protection against cyber attacks
- Operation is highly resilient to IP link failures
- Low barrier for maintenance by own personnel
- Seamless integration with broadband data networks and applications
- Lowest Total Cost of Ownership



Small and light, the SC21 is the next-generation, smart TETRA hand-portable radio.

A future-proof TETRA radio, providing intuitive operation and outstanding performance, even in the toughest conditions.



The STP8X offers unrivalled levels of ruggedness and robustness. Its IP67 rating means that it is able to withstand submersion in up to 1m of water for 30 minutes and it is completely dustproof. Its suitability for the harshest and most challenging of environments is considerably enhanced by the fact that it meets the new V6 of the IECEx/ATEX standards



A world-class TETRA Gateway designed for flexibility, paired with Bluetooth and Wi-Fi.



A complete vehicle communication hub for Mission Critical LTE Data and Voice services.

The World's Largest Mining Companies Trust Sepura For Their Communications

JOIN THEM

Our complete specialist solutions provide you with a powerful data and voice network that can automate and streamline essential processes, providing accurate and consistent real-time data, enhanced worker safety and superior asset protection.

Highly secure - and with no single point of failure - our systems can keep you communicating when other systems fail. And our rugged terminals can deal with some of the harshest conditions on earth and without compromising functionality.

With Intrinsically Safe options meeting IECEx/ATEX standards, our specialist solutions provide a powerful voice and data network that can automate and streamline essential processes, providing increased onsite security and superior asset protection.

Worker safety is prioritised through features such as Man-Down, using motion sensors to detect lack of movement, and Lone Worker, which can be configured to raise an emergency call if a status change is detected.

Utilities

COMMUNICATIONS SOLUTIONS FOR GAS, ELECTRICITY, AND WATER PROVIDERS

With Intrinsically Safe options meeting IECEx/ATEX standards, our specialist solutions provide a powerful voice and data network that can automate and streamline essential processes, providing increased productivity, improved onsite security and superior asset protection. They can also help to ensure business continuity through effective allocation of resources.

Highly robust and secure - and with no single point of failure - they can keep you communicating when other systems fail, permitting a rapid response, even in emergency situations.

Worker safety is prioritised through features such as Man-Down, using motion sensors to detect lack of movement, and Lone Worker, which can be configured to raise an emergency call if a status change is detected.

Tough environments demand tough solutions

COMMUNICATION IN SAFETY CRITICAL ENVIRONMENTS

Effective and reliable communications can make the difference between life and death. Nowhere is this more evident than in 'safety critical' environments, such as those found in the oil, gas, petrochemical, mining, manufacturing and construction industries.

TETRA two-way digital radio systems were designed with 'mission critical' users in mind and are able to support high levels of coverage, capacity, reliability, availability, security and redundancy.

The oil and gas sector as a whole faces a huge range of challenges which affect its communications requirements. Maintaining safety of operation in dangerous situations and dealing quickly with any incidents arising are two of the key considerations. Optimising the workload and maximising the efficiency of the workforce, meeting the enhanced need for security and dealing with extremes of temperature and adverse weather conditions are also highly important.

Designed to be secure, resilient, feature-rich and interoperable, TETRA has become the clear choice for many organisations in the oil and gas sector.

With Intrinsically Safe options meeting IECEx/ATEX standards, our specialist solutions provide a powerful voice

and data network that supports and enhances production - reducing costs, maximising output and promoting swift decision-making.

As such, TETRA solutions are ideally suited to safety critical environments.