

TETRA / TEDS

Mobile Station Protocol Stack

The fastest, lowest risk route to TETRA terminal equipment.

You provide the hardware, we provide the software: a feature-rich TETRA plus TEDS mobile station protocol stack with full test support.

Capability brings complexity. TETRA is a TDMA digital technology similar in function to GSM. The content of the standards is large, and growing. With mature TETRA technology and experienced TETRA engineers, Etherstack manages this complexity so our customers can focus on their market and radio product.

Etherstack's ETSI/TIP TETRA/TEDS Mobile Station Protocol Stack (Layer 1-3 plus Application) is provided as a series of highly structured ANSI C90 code modules. As with all Etherstack protocol stacks, these are straightforward to integrate – they are independent from the underlying operating system and suitable for a range of radio architectures with different E2EE, AIE and security requirements.

Clean interfaces, thorough documentation and automated test support make interpreting the software function and mapping it to the standards straightforward.

We provide support throughout a project - and beyond - to ensure your

radios are fielded successfully. With 14 years' experience in TETRA and 20 in protocol stack development, our highly knowledgeable engineers act as an extension of your engineering team.

Potential customers are welcome to appraise our TETRA technology in our labs in Yokohama, London, Sydney or New York.

Technology Package

- ANSI C90 TETRA Software
- Software Specifications (to ETSI ETS and TIPs)
- Interface Specifications
- High Level Design
- Software Test Plan
- Software Test Description (traceable to specifications)
- Test Scripts (traceable to specifications)
- ELITE and ESTV
- Integration Services
- 12 Month Warranty

Starter Features

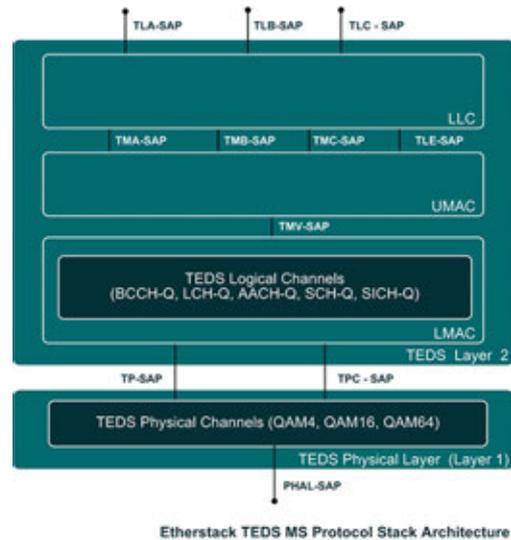
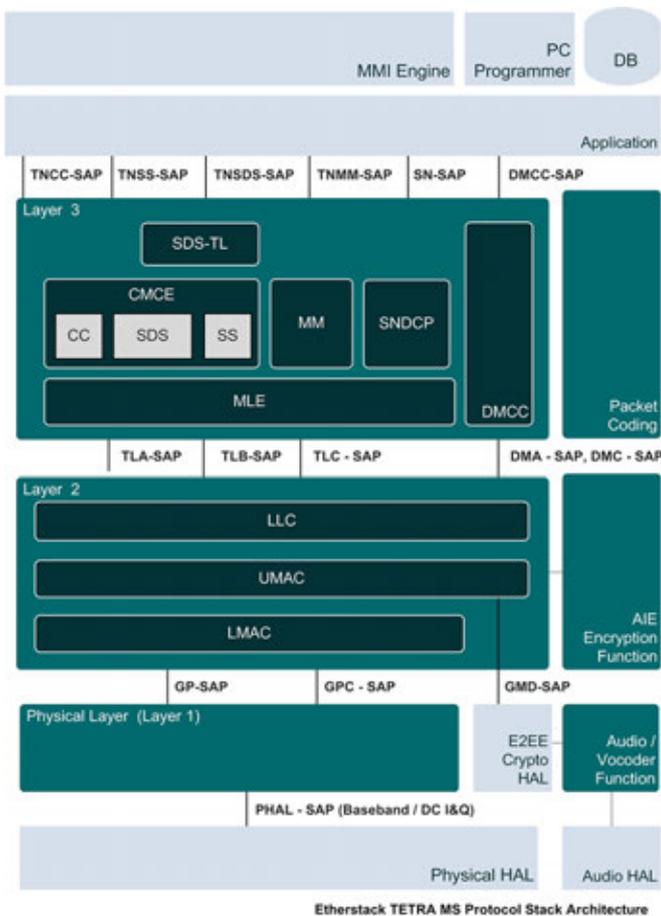
Trunked Mode Operation (TMO), All Mandatory TETRA Call Types, Short Data Service (SDS) (1-4), Registration/De-Registration, Authentication, Cell Reselection

Standard Features

Adds: Direct Mode Operation (DMO), Single and Multi-Slot Packet Data, Energy Saving Modes, Power Control, Migration, Group Address Management, Air Interface Encryption (Enable/Disable support for Classes 1, 2 and 3), OTAR

Feature Options

TEDS, End-to-End Encryption, SDS-TL, Dynamic Regrouping, User/Network Personalisation, Advanced Supplementary Services, Seamless Handover (Type 1 & 2), DMO Gateway, DMO Repeater



TEDS Protocol Stack

Etherstack has supplemented its field-proven TETRA Release 1 TMO+DMO protocol stack with 25kHz - 150kHz TETRA Enhanced Data Service (TEDS).

Our TEDS solution gives you an advantage. Etherstack has invested significant effort to overcome the technical challenges of high rate data extension. We have implemented advanced link adaptation, turbo coding and Quality of Service (QoS) algorithms that ensure the best possible performance outcome.

We have also implemented a complexity reduction exercise so that our TEDS

solution can be deployed on existing TETRA hardware in 50kHz QAM (4 to 64) mode.

TETRA and TEDS protocols are available either separately or integrated together and are compatible with a wide variety of hardware and software environments.

Full Package, Fixed Price

Etherstack offers a highly competitive fixed price for a full technology package that includes technical documentation for straightforward integration, our pioneering automated protocol stack test system (ELITE), Etherstack TraceViewer and a comprehensive test script library that provides traceability to the requirements.

Software Reuse: Reduce Cost and Time-to-Market

Protocol software represents a key investment. It is important you can update it and reuse it on future platforms to save money, reduce risk, hasten time-to-market and respond quickly to changing requirements. **Code portability, reuse and maintenance** are our priorities.

Risk-Free 12 Month Warranty

After delivery, Etherstack provides a 12-month warranty against any defects. If an issue is found we fix it immediately at no extra cost.

More information on Etherstack protocol stacks can be found on our website: <http://www.etherstack.com/eu/pmr.html>

About Etherstack

Etherstack engineers specialise in radio communications software.

With two decades experience and an international client base, Etherstack combines wireless protocol software design with all-IP soft switching expertise derived across professional mobile radio, military and cellular communications.

We work closely with our customers to achieve technical excellence, successful delivery at fixed price, ongoing support and software that can be reused.