

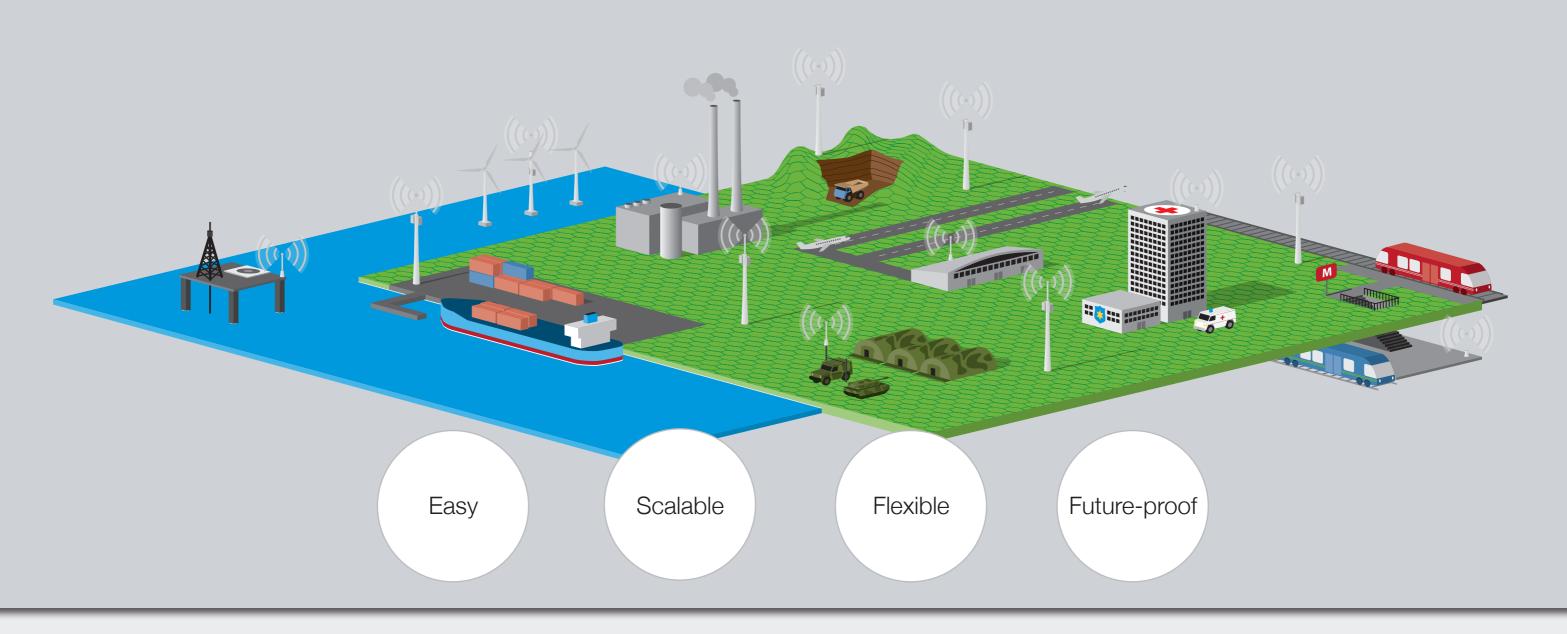




Welcome to a World of Professional Radio Communications

The power of true scalability





### The power of true scalability

Specialized in future-proof, truly scalable professional radio communications solutions

DAMM TetraFlex<sup>®</sup> Systems are specifically designed to adapt or grow with you, without incurring major additional infrastructure costs. This increases functional efficiency while significantly reducing both operational costs and Total Cost of Ownership.

#### Choosing the right technology

DAMM has been fully committed to TETRA technology for more than a decade. With our new MultiTech Platform, DAMM has enlarged the technology portfolio to now support:

- TETRA
- TEDS
- DMR
- Analog

So you can get all this, in one coherent and fully integrated system.

#### Simple deployment and operation

Our 100% IP-based technology platform gives you full architectural network flexibility. You can increase capacity, extend network coverage or move capacity from one area to another, as needed. You can even use our mobile rapid deployable solutions to create emergency or temporary radio networks, wherever and whenever you need them.

#### Self-configuring site expansion

The DAMM TetraFlex IP-based platform connects all network components - including base stations, dispatchers, network management tools, external gateways and other applications - in one stateof-the-art flat distributed IP architecture.

No central switch is needed. It works with our intelligent DAMM TetraFlex software to enable

smooth self-configuring site expansion, even while the DAMM radio communications system is fully operational.

#### Ready for tomorrow's challenges

As data plays an ever greater role in daily operations, you want a system that can support tomorrow's demands. DAMM TetraFlex Systems have been designed to work seamlessly with tomorrow's advanced LTE data solutions.

Off-the-shelf mobile broadband data devices can be fully integrated into your DAMM TetraFlex System, with a high level of authentication and encryption security. This allows you to send large data files, such as pictures or video streaming between data devices and DAMM TetraFlex Dispatchers as securely as a voice transmission.

#### Active on the world stage

DAMM TetraFlex Systems are currently operational in hundreds of mission-critical communications applications worldwide. Industries and sectors we work with include:

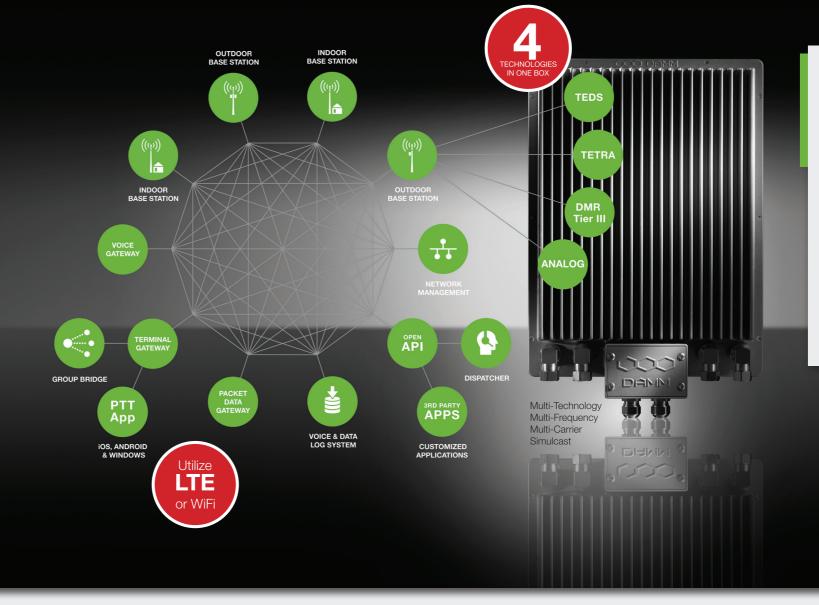
- Rail & Metro networks
- Oil & Gas industry
- Regional operators
- Military
- Public safety
- Mining Airports
- Utilities

We will be pleased to provide case studies of recent projects on request.

# Did you know?

Our flat distributed IP architecture and intuitive software work together to enable effortless self-configuring site expansion. You can add or integrate all network components – including base stations, dispatchers, network management facilities and external gateways – at any time - even while the system is in operation.

Now across all technology modes, supported by the DAMM Multi-Tech Platform



# DAMM TetraFlex System

Critical Radio and Broadband Communication made easy

#### Maximum system flexibility

The DAMM TetraFlex System offers both highcapacity rack-based indoor base stations and compact, easy to handle outdoor base stations. These can be freely combined to create the ideal system for your needs - independent of the seleted radio technology.

#### Rugged performance

Our compact outdoor base station has IP65 protected housing. It's built for installation in harsh environments such as on antenna masts or in tunnels. In addition, the compact DAMM Outdoor Base Station supports rapid mobile deployments. As examples, it can be delivered either in a tough wheeled suitcase for maximum mobility, or housed in a 19" modular cassette that can easily be mounted in trucks or containers.

#### Reliable and failsafe communication

To ensure constant availability, even in the event of a power outage or during mobile deployment, the DAMM TetraFlex System features full support for battery back-up, redundant controllers, carriers and power supply.

#### No single point of failure

Thanks to the intelligent distributed network architecture, all system information is constantly replicated at all sites in the network, eliminating any single point of failure. This way, local call and data traffic will continue without interruption.

All features will remain intact, even if one or more local sites lose connection to the rest of the network.

#### Unlimited application integration

DAMM TetraFlex supports several types of gateways for flexible integration to external systems. An Application Program Interface (API) enables easy integration with 3rd party customized applications for specific industries and sectors.

#### Effortless interoperability

As an independent infrastructure provider, DAMM TetraFlex was developed for full interoperability (IOP) with all TETRA terminals, and DMR terminals.

This frees you to choose and combine any of your preferred TETRA or DMR terminals on the market.

#### Intuitive and user-friendly interface

The unique graphical DAMM TetraFlex Network Management system provides a user-friendly and highly flexible tool for subscriber management, monitoring and optimization.

Thanks to the underlying IP technology and dedicated DAMM maintenance facilities, you can easily monitor your entire network, manage subscribers, operate sites and much more – regardless of where you are in the world.

### DAMM MultiTech Platform

**Multi-Technology** - The world's first outdoor base station featuring 4 technologies in one box

**Multi-Frequency** - Extending coverage by supporting VHF and UHF mode in all technologies

**Multi-Carrier** - A flexible, cost-efficient solution that enables up to 4 carriers in one box, and even combines multiple technologies in one box

**Simulcast** - Available for DMR and Analog, and now also offering repeater functionality for TETRA and TEDS

# Build and manage your solutions across technologies

#### 100% IP-based decentralized

**infrastructure** - Combine compact indoor and rugged outdoor base stations – now even across TETRA, TEDS, DMR Tier III and Analog

Manage your assets with built-in applications including Network Management, Dispatcher, Voice & Data Log System

**Use any radio** with the DAMM TetraFlex System

Use your tablet or smartphone to extend coverage and data capacity with Android, iOS or Windows soft terminals



# Trusted by industry leaders worldwide

DAMM combines decades of leadership with cutting-edge digital communi cations solutions to deliver an exceptional R.O.I.

#### Think big, start small, scale fast

Companies with a successful critical communications radio platform think in terms of total life-cycle costs and economics. With DAMM, you can achieve lowest possible cost of ownership in CAPEX as well as OPEX. Based on decentralized architecture, DAMM solutions enable you to scale up, scale down and move around—at the speed you need.

Founded in 1981, DAMM was a pioneer with the very first NMT450 mobile phone.

In 1994 DAMM provided the first Analog Base Station development for R&S BICK Mobilfunk GmbH, followed by the technology Partnership

with Motorola in 2001, and with THALES Communications S.A. in 2003. In 2005 the DAMM TetraFlex single node was released through partners worldwide.

Our aspiration is to continue innovating critical communications by evolving future-proof solutions across multiple technologies.

Today, DAMM is redefining critical communication with a unique system that enables up to 4 carriers simultaneously across 4 technologies - all purely software defined. The DAMM MultiTech Platform offers 4 technologies in one box: TETRA, DMR Tier III, TEDS and Analog.

**Mission Critical Communication** TETRA - First launched in 1995, Terrestrial Trunked Radio (TETRA) is today the definitive standard for the most demanding radio communications applications worldwide. TETRA's fully digital technology provides lownoise, secure and robust communications. Key features include individual simplex and duplex calls, group calls, pre-emptive emergency and priority calls, Dynamic Group Number Assignment (DGNA), authentication, late entry, voice encryption and packet data services.

TEDS - TETRA Enhanced Data Service is an extension of the TETRA standard for

professional mobile radio to provide a high speed data service.

**DMR -** Digital Mobile Radio is a digital radio standard specified for business mobile radio users developed by ETSI.

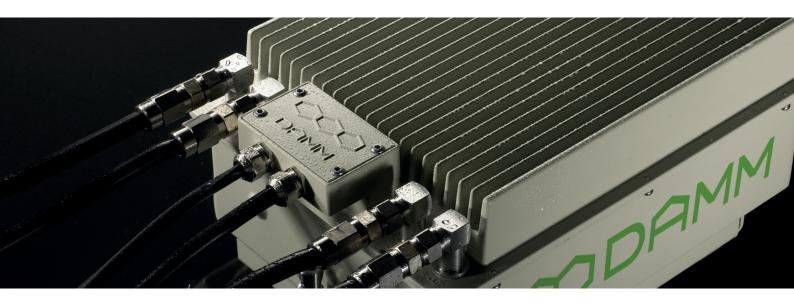
Business critical or mission critical?

With DAMM, you can use the most suitable technology at any time, with just one system. DAMM has an extensive global network of certified system and application partners. Need help to select products, find references and case studies, or how to choose the best critical communication for your business? Talk to us.



### TETRA and DMR over LTE

Benefit from coverage extension as well as data capacity for videos and pictures with the DAMM PTT App - available for Android, iOS and Windows. Stay vendor independent and fulfill the needs for non-critical voice & data communication operating through WiFi, UMTS(3G) and LTE(4G) networks.



### Experts in Critical Radio and Broadband Communication

DAMM has been a leader in professional radio communications since 1981. Through superior engineering and a constant focus on reducing complexity and costs, we are one of the global leaders in Mission Critical Communication today.

Hundreds of successful projects worldwide have proved the durability and cost-effectiveness of our solutions. They have also earned us a reputation for providing the most scalable, flexible, future-proof and user-friendly infrastructure on the market. DAMM holds the prestigious ISO 14001 certificate. And we are continuously setting new targets for reducing the environmental impact of our products, production and daily work processes.

To support our state-of-the-art DAMM TetraFlex Systems, DAMM has built an extensive global network of certified system and application partners. We only choose highly experienced partners with substantial knowledge of critical communication.

For more information or to find a certified DAMM TetraFlex System Partner near you, please visit www.dammcellular.com



DAMM Cellular Systems A/S Møllegade 68 6400 Sønderborg Denmark