DAMM Indoor System BS418

The high capacity DAMM Indoor System is the most user-friendly, flexible and cost-effective TETRA infrastructure system available. With its high reliability and unique design it is the ideal solution for mission-critical communications.

Full network flexibility
DAMM systems are scalable and can handle sites of any size – from one-site solutions with local coverage to large-scale multisite solutions, using any combination of outdoor and indoor DAMM base stations. Together with the intelligent DAMM TetraFlex software, simple and smooth site expansion is possible, even while in operation.

The 100% IP-based technology provides full architectural network flexibility with all network components connected in a single state-of-the-art infrastructure without a central switch.

This product is part of our single-technology portfolio, but can be fully integrated into any of our multi-technology products.

High Capacity. High Efficiency
DAMM Indoor Systems can be configured with up to 16 TETRA carriers in two racks, giving in total 64 time slots with front access to all field-replaceable units and terminals.

Excellent receiver sensitivity is achieved with the Tower Mounted Amplifier/Duplexer (TMA/TMD) by eliminating receiver cable loss. Additionally, the TMD enables dual-diversity operation using only two antennas.

DAMM Indoor Systems are characterized by extremely low power consumption and can also be delivered as a high output power version.

Secure and failure tolerant
Featuring full support for battery backup as well as redundant controllers, power supplies and carriers, DAMM Indoor Systems meet your highest requirements for reliability. The intelligent decentralized architecture replicates information to all sites in the network, avoiding any single point of failure.

Unlimited application integration
DAMM TetraFlex is supplied with Application Gateways for easy access to the Application Programming Interface (API), Packet Data Gateways and Voice Gateways, allowing you straight-forward development of customer-designed applications or integration to existing telephone systems and control room equipment.

As an independent TETRA infrastructure provider DAMM base stations are IOP certified for full compatibility with all TETRA terminals, providing you with the option to freely choose your favourite terminal brand.

Wide range of advanced software tools
The DAMM TetraFlex system is available with a wide range of application software such as Voice and Data Log System, Dispatcher, Group Bridge and a comprehensive Network Management tool including subscriber management and network performance statistics.

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Key specifications

The DAMM Indoor System consists of the BS418 Base Station for up to 16 carriers, in a high power or normal power version, and comes with a Tower Mounted Amplifier/Duplexer. The system is pre-installed with the DAMM TetraFlex Software package.

DAMM TetraFlex System – default settings

Function	No.
Organizations max.	1000
Profiles max.	10000
Subscribers max.	150000
Nodes max.	999
Voice GW Connection max.	32

Function	No.
Application GW connections max.	20
Application GW streams max.	100
Application GW streams (client) max.	32
Log Servers max.	25
Terminal GW Connections max.	10

Only default settings. Can be expanded on request.

Base station
Frequency bands

	300MHz band			400MHz band		800MHz band
RX	300-310MHz	350-360MHz	380-390MHz	410-420MHz	450-460MHz	805-825MHz
TX	336-346MHz	360-370MHz	390-400MHz	420-430MHz	460-470MHz	850-870MHz
BW	10MHz	5MHz	5MHz	5MHz	5MHz	14MHz

For Russia 412-417/422-427MHz band is available. Other frequencies on request.

Transmitter and receiver

- TX power transceiver: Max 25W TETRA
- TX power transceiver (high power version): Max 62.5W TETRA
- TX power at antenna connector: 0.5W to 10W TETRA remotely adjustable
- TX power at antenna connector (high power version): 0.5W to 25W TETRA remotely adjustable
- RX sensitivity static: -121dBm with diversity (-117dBm without diversity)
- RX sensitivity dynamic: -118dBm with diversity (-112dBm without diversity)
- Receiver diversity: Dual as standard
- Tower Mounted Amplifier/Duplexer: Combines TX and RX to one antenna and (TMD412) amplifies the RX signals
- Redundancy BSC and power supply: Hot standby
- Synchronization: Internal or external with GPS

Antenna connections

- TMD operation: One TX/RX-A and one RX-B antenna
- TMA operation: One TX and two RX antennas
- GPS antenna: One GPS antenna per BSC. Active (+5VDC) or passive.

Combiner

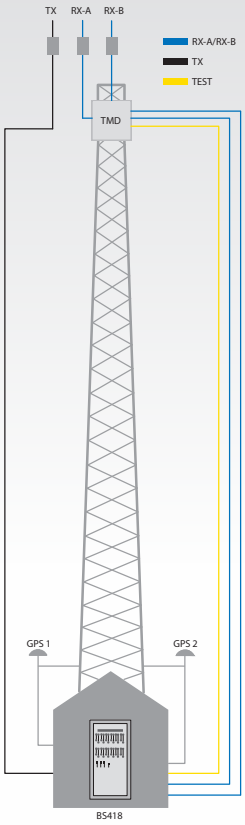
- Cavity combiner system: Motor tuned with support for up to 16 carriers per antenna
- Hybrid combiner system: Available as option for max. 4 carriers

		BS418	BS418 High Power
Power	Input voltage	100-240VAC or -48VDC	
	Power consumption*	910W	1760W
	Optional external battery	Supported	

Mechanical	Dimensions (HxWxD)	1455 x 542 x 520mm 30 U
	Rack	19 inches
	Weight*	117kg
	Storage temperature	-40°C to +85°C
	Operating temperature	-20°C to +55°C
	Encapsulation	IP20

** Fully equipped*

DAMM TetraFlex
high capacity indoor solution



Coupled for TMA operation

Standards and approvals

- TETRA Specification, EN 300 394-1 v. 3.1.1; please refer to DAMM TetraFlex feature list
- IOP Certification; please refer to www.tandcca.com for details
- DS/EN ISO 9001:2008, DS/EN ISO 14001:2004, DS/OHSAS 18001:2008.

Note: Compatibility tests with TETRA terminals are maintained by DAMM for newest SW updates.

Specifications subject to change without notice
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2019.03.29_Ver. 4.0_L.01