Field Mobile TetraFlex® - FMT

DAMM's Field Mobile TetraFlex® (FMT) solution is a fully functional two-carrier TETRA communication system. Housed in a 19" modular cassette, it has been specifically designed for field deployable solutions. Its convenient size and form factor mean that it can be easily built-in to trucks, cars, containers or other mobile units.

Rapid deployment in even the toughest situations

The FMT system offers a flexible, mobile and compact TETRA system with very low power consumption. Its convenient size means that it can be rapidly and easily deployed in the field to respond to fast-changing demands in location, capacity and coverage. The system has been designed to meet the very highest security, safety and reliability requirements, especially in situations where people's lives and safety depend upon reliable communications.

Mission-critical capability comes as standard

The FMT system has already been successfully deployed in military field operations, by army, air forces and in rapid deployment exercises. The increasingly fast-paced and hightech military environment places extremely tough demands on communications systems, and the ability to coordinate and combine resources and rapidly disseminate accurate information is crucial. FMT is also ideal for a wide range of less dramatic but sometimes vital applications, including offshore deployment, humanitarian relief work, event management, on-campus communications, and much more.

Easy scalability and complete interoperability

FMT allows full scalability or integration into larger multi-site networks. This is achieved by connecting the system to other FMT racks or existing TetraFlex networks via the IP-based network infrastructure.

FMT is also capable of performing group calls to any other TETRA or even analog network, regardless of manufacturer, via the optional TetraFlex Group Bridge solution.

Plug-and-play simplicity and flexibility in one

Thanks to the well-known operational plug-and-play simplicity of the TetraFlex system on which it is based, FMT provides a fully operational communications system in no time. It also provides total flexibility for quick extensions in both subscriber capacity and coverage area.

Powerful TETRA performance in a compact format

Despite its compact dimensions, the FMT system provides the full range of TETRA features. Through its gateways, it is also interoperable with many other legacy networks, including PSTN/POTS, GSM, TETRA and other systems. Optionally, FMT has a wide range of advanced software tools, such as remote Network Management, Voice & Data Management for recording, storing and replaying all calls and SDS messages, and our advanced Dispatcher solution with its GPS positioning system.

Key Specifications

Features

	Included	Optional *
2 Carrier System	✔	
Network Manager	✔	
Statistics	✔	
Voice and Data Log System		✔
Dispatcher Application		✔
Voice Gateway		✔
Packet Data Gateway		✔
TetraFlex Group Bridge		✔
Multi node Functionality		✔

*) Dongle controlled functions

Base Station Transceiver BS421
Frequency Bands

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

Transmitter and Receiver
- TX power at antenna connector:
  0.5 W to 10 W TETRA remotely adjustable
- RX sensitivity with diversity, static: -121dBm
- RX sensitivity w/o diversity, static: -118dBm
- RX sensitivity with diversity, dynamic: -118dBm
- RX sensitivity w/o diversity, dynamic: -112dBm
- Receiver Diversity: Dual as standard
- Built-in duplexer:
  Combines TX and RX to one antenna
- TX Redundancy: Hot Standby
- Synchronization: Internal or external with GPS

Antenna Connections
- Antenna set-up:
  One antenna per carrier, min. two antennas for diversity
- GPS antenna:
  One GPS antenna per carrier. Active (+5 VDC) or passive.

Specifications

Parameter	Value
Power Supply:	
Supply voltage	240V AC or -48V DC
Optional internal battery	4 x 12V 7Ah
External connectors:	
230 V AC mains connector	Amphenol 4 pol MIL-C-26482 circular male
24V DC connector	Jaeger 4 pol male 5337 55006
LAN / WAN connector	RJ45 Cat 5e Conec Industrial Ethernet (IP67)
RX connectors RX A and RX B	N Female
A-Out connector	N Female
GPS antenna connector	BNC Female
Spare output connectors	3 x RJ45 Cat 5e Conec Industrial Ethernet *
Physical:	
Dimensions (HxWxD)	57.6 (13U) x 48.3 (19") x 39.6 cm
Weight	38 kg (48 kg with battery)
Operating temperature	-20ºC to +55ºC
Storage temperature	-40ºC to +85ºC

* If a Cisco 2900 series router with Call Manager SW is used, spare connectors can be used for transmission protocol interfaces, such as ISDN, E1 PRI, PSTN.

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