DAMM Rapid Deployable TetraFlex® – RDT (BS421)

DAMM's Rapid Deployable TetraFlex® (RDT) solution has been specially designed for first-responder emergency and security services. Housed in a tough wheeled suitcase for maximum mobility, RDT offers a fully functional high-powered TETRA communication system that can be instantly deployed.

Powerful TETRA communications on demand

DAMM's Rapid Deployable TetraFlex (RDT) solution is a fully featured mobile TETRA system. RDT is particularly effective in emergency situations like road accidents, natural disasters or search and rescue operations in remote rural areas. RDT can be easily transported to where it is needed and made fully operational almost instantly – even if there is no existing network.

Self-contained, robust and secure

The fully self-contained RDT system comes in its own rugged case for easy and secure transportation and can be deployed in even the most extreme environmental conditions. For optimal mobility, the suitcase is mounted on wheels and equipped with a telescopic handle. RDT enables first-responder emergency or security services to instantly set up a robust, fully configured and highly secure communications system on site, which can then serve as a reliable temporary command centre for radio users in the field.

High-power performance, low power consumption

RDT comes with its own integrated power supply. Thanks to the system's low power consumption, it is the ideal solution for applications without access to AC power. In addition to its internal battery, which offers independent emergency power for more than two hours, RDT can be powered using the 24VDC socket of any vehicle. For ultimate flexibility, it can also be connected to solar-powered devices or to a 230VAC generator. All interface connections are easily accessible from the outside of the case, while the built-in fan keeps the system cool even with the case fully closed.

Full TETRA functionality

RDT comes with a full range of advanced software tools, including remote Network Management and Voice and Data Log System for recording, storing and replaying all calls and SDS messages. It can even be connected to an advanced Dispatcher solution with a GPS positioning system.

Modular flexibility for extended network coverage

RDT is a highly flexible modular system. If the area requiring network coverage is very large, several cases can be linked together to create a multi-site configuration using secure IP protocols. Furthermore, the subscriber capacity can easily be extended by connecting two RDT carriers. Thanks to DAMM's innovative TetraFlex Group Bridge solution, the system can also perform group calls to any other TETRA network or even to analog networks, regardless of manufacturer.

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

Key specifications

Features

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

*) Dongle-controlled functions

Base Station Transceiver BS421 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

Transmitter and receiver
- TX power at antenna connector:
  0.5W to 10W 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
- Synchronization: Internal or external with GPS

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

Specifications

Parameter	Value
Power supply:	
Supply voltage	240VAC or 24VDC
Power consumption	107W full power
Internal battery (optional)	4 x 12V 7Ah
Internal connectors:	
Connector for external monitor	15-pin VGA
Connector for mouse/keyboard/dongle	USB
Internal LAN test connector	RJ45, Ethernet 10/100Mbit/s
External connectors:	
230VAC mains connector	Amphenol 4-pole MIL-C-26482 circular male
24VDC connector	Jaeger 4-pole 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	N Female
Physical:	
Dimensions (HxWxD)	62.5 x 50 x 36.6cm
Weight	46.6kg
Operating temperature	-20°C to + 40°C
Storage temperature	-40°C to + 85°C

Specifications subject to change without notice
DAMM and TetraFlex are registered trademarks of DAMM Cellular Systems A/S