Leathering MIL-STD Time Division Multiple-Access (TDMA) protocols, the Viasat UHF DAMA/IW Network Management Solution (NMS) allows for simultaneous communications of UHF SATCOM terminals and networks. The Viasat NMS consist of the Viasat Integrated Waveform Channel Controller (IWCC), the Viasat Network Channel Controller (VNCC) and the Viasat Visual Integrated SATCOM Information, Operation and Networking (VISION) planning and network management software. These three entities enable multi-user group communications by adding MIL-STD TDMA protocols to traditional 5 and 25-kHz UHF satellite channels. Typically, dedicated communications are limited to one user group per channel; however with the inclusion of the Viasat NMS, TDMA time slots are created allowing for multiple data and voice users to operate simultaneously. The Viasat NMS not only maximizes channel efficiency, but also provides users with reliable voice and data connections, supporting better voice quality and higher data throughput. The Viasat NMS is a customized system based on user requirements, allowing for increased connectivity to UHF SATCOM terminals on land, sea, and in the air.

The Viasat IWCC supports the growing demands for capacity, optimized channel performance, and backwards 25-kHz DAMA interoperability. This capability provides unprecedented efficiency. By supporting IW (IW Phase II), the IWCC supports both pre-assigned and demand-assigned services, allowing channels to be tailored to dynamic operational needs. Viasat has successfully installed UHF DAMA/IW Network Management Solution in Network Control Stations for coalition partners around the world.

The Viasat VNCC provides legacy 25-kHz DAMA, including services on both 25-kHz and 5-kHz slave channels. This provides interoperability with the fielded legacy radios in use today.

Viasat VISION is an integrated user-friendly interface to manage all 25-kHz legacy DAMA and IW networks and services, and the latest addition to our UHF portfolio. The Viasat VISION platform provides a graphical user interface view of trending data. Core capabilities of the platform include planning the network, operating, status monitoring, as well as adding and removing services when missions change. With Viasat VISION, you can locally or remotely monitor and control ground stations including equipment status monitoring, event/alarm management and system performance monitoring. Having the capability to remotely control all sites from a single terminal, allows users to simplify logistics and reduce manpower needed to manage the network. The platform’s flexibility and scalability with respect to the number of sites, quantity and type of equipment, and hardware configuration allows for increased interoperability. The Viasat VISION interface can support 25-kHz DAMA and IW sessions simultaneously, allowing for backwards 25-kHz DAMA and IW interoperability.
SAMPLE NOTIONAL 8 CHANNEL/MULTI-RACK NMS SYSTEM CONFIGURATION

RT-1830
- MIL-STD-461F: EMC
- MIL-STD-810: Environmental
- CE Mark—EMC & Safety:
  - EN55032: Radiated Emissions
  - EN55024: Radiated Immunity
  - EN60950-1: Safety

HPA (OPHIR 4039R)
- MIL-STD-810: Environmental
- CE Mark—EMC & Safety:
  - EN55032: Radiated Emissions
  - EN55024: Radiated Immunity
  - EN60950-1: Safety

WAVEFORMS
- MIL-STD-188-181B/C: Dedicated and IW
- MIL-STD-188-181C: IW Capable
- MIL-STD-188-183/A: VNCC
- MIL-STD-188-185A: IWCC

SPECIFICATIONS

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