RUGGEDCOM WIN for AeroMACS
Aeronautical Mobile Airport Communications System
RUGGEDCOM WIN family of products is the first field proven broadband wireless product portfolio designed for AeroMACS, delivering the benefits of carrier-grade 4G technology to airport operations.
AeroMACS (Aeronautical Mobile Airport Communications System) is a new data link technology intended to support airport surface communications. This wireless technology is mandated by ICAO (International Civil Aviation Organization) and will be used for airport ground communications as well as for a safe, orderly, and expeditious flow of air traffic around the globe.

Using the 5000–5030 MHz and the 5091–5150 MHz band, allocated by the International Telecommunication Union, the RUGGEDCOM WIN products are optimized for AeroMACS based airport surface communications.

With the use of an all IP radio, RUGGEDCOM WIN products can be easily integrated in existing airport networks or future networks such as PENS (Pan European Network Services) in Europe, or SWIM (System Wide Information Management) in North America.

Siemens offers 4 products for setting up wireless networks in airports: the RUGGEDCOM WIN7251 base station, the WIN5251 pole-mounted subscriber unit, the WIN5151, and the WIN5151-V-GPS mobile subscriber units.

These products go beyond the AeroMACS standard feature set to provide the following additional functionality:
- Built-in ASN (Access Service Network) Gateway, with embedded management for routing and mobility in the base station
- Full Layer 2 deployment option, including encrypted multicast VLANs support
- IP-CS and ETH-CS co-existence
- Highly accurate NTP Server at the subscriber unit to synchronize end devices
- IEEE1588 synchronization support, with redundancy to GPS
- Extended cell range: coverage beyond the required 8 km and up to 40 km
- SNMP-V3 management system
Security information

In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial security concept. Siemens’ products and solutions only form one element of such a concept. For more information about industrial security, please visit siemens.com/industrialsecurity

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