MST

Productivity and Safety through Mine-Spec digital applications

FUSION
voice

Push-to-talk voice communications over a Wi-Fi network

Dedicated in-vehicle platform

MinePhone compatible

Network Agnostic

FUSION Voice is MST Global's unique platform, that brings together Wi-Fi based VoIP communications with traditional UHF or VHF radio systems onto a single, vehicle mounted device. Built on proven hardware (the Tait UnifyVehicle platform), FUSION Voice can operate on any 2.4 GHz Wi-Fi network, and is optimised for roaming on the MST IMPACT software network. FUSION Voice effectively fills the gap in digital communications where hybrid communication technologies exist on a work site. Additionally, it offers far more features above traditional radio units, including the ability to operate in either Wi-Fi coverage areas or radio coverage areas by the simple flick of a switch.

FUSION Voice adds to MST's unified communications portfolio to allow the benefits of IP based communications to be readily available to the underground industry.

SPECIFICATIONS

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Hardware Model
• FSN-PLATFORM-01

Module Compatibility
• FSN-VOICE

Dimensions
• Body: 52mm x 160mm x 175mm
• Control Head: 71mm x 184mm x 35mm

Weight
• Body: 1.2kg
• Control Head: 0.33kg

Power Supply
• DC: 10.8-16VDC
• AC: Desktop PSU 100-130V or 200-250V (not included)

Rated Audio
• Internal speaker: 3W

Environmental
• Water and Dust: IP54
• Operating Temperature: -30°C to 60°C

LAND MOBILE RADIO - POWERED BY TAIT
• Digital Protocol: DMR:ETSI TS102361
• Signaling options (Analog): MDC1200, encode and decode, Two tone decode, PL (CTCSS), DPL, (DCS), Selcall
• Operation Modes: Trunked, Conventional
• Channel spacing: 6.25/12.5/15/20/25/30kHz

VHF
• Frequency range: 136-174MHz
• Output power: 25W, 10W, 5W, 1W
• Input current: 5.5A
• Standby current: 0.1A
• Audio response (Analog): +1/-3DB
• Audio distortion (Analog): 2.5%@1kHz, 60% deviation

UHF
• Frequency range: 450-520MHz
• Output power: 25W, 10W, 5W, 1W
• Input current: 5.5A
• Standby Current: 0.1A
• Audio response (Analog): +1/-3dB
• Audio distortion (Analog): 2.5%@1kHz, 60% deviation

Regulatory
• USA: CFR47
• Canada: RSS-119
• Europe: EN300-086, EN300-113, EN300-219, EN301-489, EN60950
• Australia/New Zealand: AS/NZS4295 AS/NZS43652

Emissions Designators
• 11K0F3E, 16K0F3E* , 6K60F2D, 7K80F2D, 9K60F2D*, 10K8F2D*, 7K60FXW, 7K60FXD
  *Wideband operation is not available in the USA in some bands

IP NETWORKING

Wi-Fi Interface
• Wireless Standard: IEEE 802.11g
• Security: WPA2
• Transmit Power: Max + 19dBm
• Receive Sensitivity: 6Mbps (-87dBm), 54Mbps (70dBM)

LAN Interface
• Connector: RJ45
• Standard: IEEE 802.3 100BASE-TX 10BASE-T

Supported Protocols
• TCP/ UDP/ IP, IPV4, DNS ARP, Static IP DHCP
• Real Time Transfer Protocol (RTP) RFC 1889/ RTCP FC 1890
• MST Device Discovery
• Software and configuration updates by TFTP

IP VOICE MODULE

IP Push To Talk (PTT)
• 30 site configurable channels
• Broadcast channel
• Man Down Emergency Override

Audio Features
• G.711 (A-Law & μ-Law 64kbps)
• Jitter buffer control (default 80ms, max 320ms)
• Acoustic echo cancellation

MST offices and support centers are strategically located in the world's primary mining regions.

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