

MAVERIX DT

Dual-Transceiver All-Outdoor Radio Licensed Microwave Gigabit



MAVERIX DT is a dual-transceiver all outdoor, IP radio operating from 6GHz to 42GHz, modulations to 4096QAM, and ultra-wide bandwidth operation to 112MHz ETSI and 160MHz ANSI. **MAVERIX DT** can achieve capacities up to **5.5Gbps** per radio without compression.

Each **MAVERIX DT** transceiver supports dual sub-carriers resulting in up to four sub-carriers per dual transceiver radio to increase capacity without requiring any additional equipment.

MAVERIX DT also includes XPIC and MIMO frequency re-use technologies to double and quadruple capacity using a single licensed channel. XPIC and 2+0 operation are supported using just a single radio.

MAVERIX DT is easily and inexpensively field convertible to different sub-bands via user friendly customer replaceable diplexers. Sparing only needs to include the base radio resulting in no longer a need to spare radios in specific sub-bands.

MAVERIX DT is an ideal, highly integrated all-outdoor radio for the most demanding applications.

BROADCAST SOLUTIONS

- Up to 5.5 Gbps data fulfills audio, data and voice link requirements for multiple station clusters
- Bidirectional for audio backhaul and data network capabilities.
- Add a security camera to your site to protect valuable station assets.
- A remote mirrored server at the transmitter site protects your business records and program content.
- All outdoor topology saves valuable rack space in your TOC.

POINT-TO-POINT SOLUTIONS

- Customer-replaceable diplexers reduce delivery times, improve system flexibility, and minimize spares.
- Adaptable antenna interface option supports third party antennas to ease migration and upgrade
- Built-in OMT or Coupler to combine carriers from each transceiver.
- Different frequencies supported in a DT radio (e.g. 6Ghz & 11Ghz)
- 2x (1+0), 1+1 HSB, 2+0, 2+2 HSB, and 4+0 configurations supported.
- 1, 2.5 and 10GbE Ethernet interfaces
- 2 x CPRI interfaces (optional)
- SyncE and IEEE1588v2
- AES256 encryption (optional)
- No-touch Wi-Fi maintenance interface (optional)
- GPS Antenna (optional)

MAVERIX DT

PRODUCT SPECIFICATIONS

FEATURES

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|---------------------------------------|---|
| Data Throughput Rate | 160 kHz to 2.4 GHz – all worldwide STL bands |
| Configurations | 2 x (1+0), 2+0 ACAP/ACCP, 4+0 ACAP/ACCP, 1+1, 2+2, 2+0 XPIC, 2 x (2+0) XPIC, 2x2 MIMO, 4x4 MIMO, 1+0 SD, 2+0 SD, 1+0 FD |
| Frequency Range | 6 - 42GHz |
| Modulation | QPSK to 4096QAM |
| Air Interface | Full Duplex FDD |
| Channel Bandwidths per Carrier | 10-160MHz ANSI and 7-112MHz ETSI |
| Diplexer | Customer replaceable |
| Frequency flexibility | Different frequencies supported in single dual carrier radio (e.g. 6GHz and 11GHz) |
| Tx Power (diplexer output) | Up to 27dBm with Built-In Advanced Digital Pre Distortion |

INTERFACES

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| Ethernet | 1 x 1G RJ45 (POE), 1 x 1G SFP or 1 x 1G RJ45 (POE), 1 x 1G SFP, 2 x 1/2.5G SFP (CPRI capable) or 1 x 1G RJ45 (POE), 1 x 1G SFP, 2 x 1/10G SFP+ |
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ETHERNET

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| Max Packet Size | 16000 bytes (Jumbo Frame) |
| Ethernet Timing and Synchronization | SyncE (G.8261), IEEE 1588V2 Transparent, Boundary, and Ordinary Clock support |
| Ethernet Features | <ul style="list-style-type: none"> • IPv6, IPv4 • L2- 16K MAC Addresses • 4096 VLAN (IEEE 802.1Q) with 1024 VLANs supported concurrently • VLAN tag translation on ingress or egress • Provider Bridging (IEEE 802.1ad, Q-in-Q) • RSTP / MSTP • Radio Link Aggregation |

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|----------------------------------|--|
| Ethernet Compression | Interface Gap and Pre-Amble Suppression, Header Compression, Payload Compression |
| QoS Packet Classification | <ul style="list-style-type: none"> • DiffServ (RFC 2475) • VLAN PRI (IEEE 802.1Q-2003) • MAC PRI • Port Priority • Port Number, Protocol • MPLS PRI |
| QoS Packet Scheduling | <ul style="list-style-type: none"> • Port – Weighted Round Robin (WRR) • Logic Port (cluster) – Weighted Fair Queuing (WFQ) or Strict Priority (SP) • Priority Queue – WFQ, Strict Priority • 8 priority queues per logical port/queue |
| QoS Congestion Avoidance | Two-rate / three color marking, WRED, Policing, Flow-Control (PAUSE packets, back-pressure) |
| QoS Traffic Shaping | Configurable |
| Protection | ITU-T G.8032 Ring |
| Encryption | AES256 |
| OAM | ITU-T Y.1731, IEEE 802.1ag, 802.3ah, Radius, Syslog |
| MEF Compliance | MEF9 Services Test Suite, MEF14 Traffic Management Test Suite |
| GPS | Advanced timing and MIMO operation (optional) |

MECHANICAL AND ENVIRONMENTAL

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| Input Power Requirements | -48 VDC direct DC or PoE (-36 VDC to -60 VDC range) |
| Weight | 9.2kg (20.3lbs) including internal OMT or coupler (2+0 configuration) |
| Size | 23.9cm x 23.2cm x 12.5cm (9.42"x9.12"x4.94") not including antenna nose or handle |
| Operating Temperature | -33oC to +55oC (-27oF to +131oF) per ETS 300 019-2-4 Class 4M5 |
| Humidity | 5%-100% |
| Weather | IP67 / All Weather |
| Safety | IEC 60950-1, -22 |
| Regulatory | US FCC Part 101, FCC Part 15B; ETSI EN 302 217 |

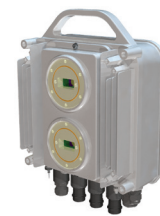


(FRONT VIEW)



(REAR VIEW ANTENNA CONNECTION OPTIONS)

Dual transceiver **Maverix DT** optional built-in OMT or coupler to combine frequencies to a single antenna port.



Maverix DT is optionally available with two waveguide ports for space or diversity reception and XPIC.