

Increase Confidence in DAS Design

When an emergency strikes within a building, first responders depend upon high-quality radio coverage from a public safety distributed antenna system (DAS). Ensuring the readiness of critical communications, Microlab's System Monitor Alarm Report Technology (SMART) Passives System enables real-time monitoring of DAS cabling, RF components, and antennas. The SMART Passives System enables pinpointing and alarming of compromised or damaged components critical for in-building public safety DAS readiness. The SMART Passives System is complemented by Microlab's broad portfolio of public safety DAS and wide-area, land mobile radio (LMR) dispatch network products, which integrate to significantly increase the confidence of RF engineers and technicians in public safety DAS design and deployment.

Microlab's reliable, wide bandwidth product portfolio covers all major commercial wireless and public safety bands, including VHF, UHF, Tetra, and FirstNet frequencies, which future-proofs deployments and reinforces system readiness. Further increasing design confidence while ensuring expected behavior, Microlab's public safety DAS products offer guaranteed specifications with assured minimal dissipative loss, RF insertion loss, voltage standing wave ratio (VSWR), and passive intermodulation (PIM). Reducing timely design engineering support and increasing customer ease-of-use, Microlab components are supported by industry-standard software tools, such as Ranplan and iBwave. Together, trusted Microlab products provide full coverage and increase capacity across independent and/or coexistent mobile radio and cellular networks, strengthening the dependability of critical, life-safety communications.

Used as a predictive parameter, mean time between failures (MTBF) is the average calculated elapsed time between system failures under normal operations and is an essential metric in determining system reliability. Microlab's overall product MTBF is more than 10 million hours, which predicts a long life and uptime. These high-MTBF components ensure trustworthy systems and device longevity, confirming Microlab as a go-to public safety DAS and wide-area LMR dispatch network solutions provider. In addition, Microlab products are IP67-rated, (protected from total dust ingress), ASTM-B117 salt fog qualified, plenum-rated (low-smoke, low-flame, and temperature-tolerant characteristics), and support a wide temperature range to provide robust environmental protection. Furthermore, Microlab manufacturing is ISO 9001 and ISO 14001 certified, demonstrating superior quality management through consistently delivering both products and services that suit customers' needs and satisfies regulatory requirements.

With over 70 years of industry experience delivering mission-critical communications solutions, Microlab is a leading component and integrated solutions partner relied on for tackling the complex challenges of public safety DAS and wide-area, LMR dispatch network designs and deployments. Microlab's wealth of expertise is leveraged with a variety of customization options supported by experienced application engineering consultation. Site-specific custom solutions and products are available for combining multiband/multi-jurisdiction, in-building, and outdoor networks to meet the diverse conditions of public safety DAS challenges and increase reliability in every DAS design.

A public safety DAS must be ready when emergencies arise, and Microlab can provide the confidence needed when designing and deploying essential, life-safety network performance and radio coverage. You can learn more about Microlab's public safety DAS solutions by visiting <https://microlabtech.com/lmr-public-safety>.