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The Navigator for Enterprise Solutions



## Astrodyne TDI



*The annual listing of 20 companies that are at the forefront of providing Aviation technology solutions and transforming businesses*

# Astrodyne TDI

## Innovations for Safe and Sound Commercial Operations

**W**ith the blurring of the boundaries between information technology equipment and audio/video equipment, the aviation industry is staring at an inflection point. The new airframe compliance standards in the industry focus on better handling of the hazards such as electric shock, thermal burns, and electro magnetic radiation, among others. However, the legacy power supplies and electromagnetic interference (EMI) filters which are typically driven by auto-transformer rectifier units (ATRU) fail to meet the modern standards of the main airframe providers in the market. They are heavy, less efficient, consume too much power, and lack the ability to meet the wide-frequency input or the current radiated and conducted noise emission standards. The enhanced safety requirements demand that the OEMs supporting the in-flight entertainment, seats, and all of the galley equipment migrate to the next-generation power supplies to ensure they support maximum safety.

Astrodyne TDI (ATDI) is a technology-driven company that provides a broad portfolio of power supplies and EMI filters. Backed by over three decades of experience in the commercial aerospace solutions domain with a keen focus on the cabin and the galley, ATDI has emerged as the go-to partner for OEMs to achieve long-term equipment reliability and seamless transition to comply with new standards.


ATDI is committed to meet and exceed client expectations through excellence in quality, customer service, employee development, and innovation. Its adherence to continuous improvement shows in its recently introduced suite of products customized using switch-mode power supplies (SMPS), a technology which is emerging in aerospace to solve the evolving safety and performance concerns. With this new launch, the company

offers aerospace companies the onramp to move from ATRUs to SMPS units. "The new airframe requirements demand wide frequency AC inputs in the US, a criterion which is impossible to accomplish with the legacy ATRU units," says Chris Viola, CEO of ATDI. However, "ATDI's SMP-based solutions, built using in-house circuits and technologies, can meet the new demanding requirements. And, with our impressive R&D and fast time to market capabilities, we are generations ahead of our competitors." Aiming to be the technology leader in the industry, ATDI continues to invest heavily in its solutions.

“ATDI's SMP-based solutions, built using in-house circuits and technologies, can meet the new demanding requirements

One of ATDI's clients, a major OEM, walked up to the company with a prospective product that was highly demanding in terms of weight, volume, and power requirements. ATDI offered a solution that met all of those objectives while enabling them to be fully compliant with the modern airframe electromagnetic noise and emissions standards. That unit is now in production for five years, operating on all the major airframes and continuing to deliver rich dividends to the client in the form of high reliability.

Having invested in AS9100, DO-160, and FAA (Federal Aviation Administration) and EASA (European Union Aviation Safety Agency) qualified repair stations, ATDI offers design, manufacturing, and support services out of China. Thus, the company offers the economies of scale and competitive pricing benefits that its competitors can't even imagine, thanks to its comprehensive compliance adherence and local support.

Going ahead, ATDI plans to add one and two-kilowatt products to its portfolio to support larger appliances and provide more solutions for applications that require higher power consumption, especially in the cabin and the galley. Having captured most of the power-supported connectivity market in the commercial aerospace industry, the company looks forward to charting new success stories in the future. 



Chris Viola