Q-MTITAN™ ARINC 846

Ruggedized, High Density MT **Quadrax Contact Solution**



Q-MTitan™ *ARINC* 846 contact



Q-MTitan[™] in D38999



Q-MTitan[™] in ARINC 600 NSX

Q-MTitan™ ARINC 846 protects an MT ferrule and fits inside size 8 Quadrax cavities to provide high density optical connectivity in harsh environments.

Radiall's MTitan™ series is a complete range of high density fiber optic interconnect solutions for aerospace and military applications. Product solutions within the MTitan™ series feature an innovative design to protect an MT ferrule and provide ruggedized multichannel interconnects in a small package.

Within this range, Radiall has developed the Q-MTitan™ contact that is the base design for the aerospace industry standard: ARINC 846, which sets the standard for interconnect assembly solutions, based on MT ferrule for use in air transport applications.

The Q-MTitan[™] contacts bring multi fiber capability through one standard size 8 quadrax cavity. This solution provides excellent cable retention and sealing on round multi-fiber cables. This robust series can withstand high temperature ranges and vibration levels, which enables the use of an MT optical ferrule in harsh environments. The scoop proof design ensures the protection of the optical end face even in difficult mating conditions.

Q-MTitan[™] provides a simplified use by customers, and is further supported by through installation/maintenance kits and fiber management solution to ease its integration. This innovative product range extends Radiall's capability to provide customers with a fiber optic end-to-end solution: from active transceivers to complex optical systems.







Q-MTitan™ with D-Lightsys transceiver



Q-MTitan™ in QuickFusio™



Designed for use in the existing #8 Quadrax cavities of off-the-shelf multipin connectors (such as MIL-DTL-38999, ARINC 600 NSX, EN4644 EPX™, EN4165, QuickFusio™ connectors and many more), Q-MTitan™ ARINC 846 contacts feature a compact, lightweight and ruggedized body that incorporates and protects the widely used MT ferrule.

Q-MTitan™ achieves and maintains excellent optical performance in harsh environments, as described in the ARINC 846 document. Fielded with ribbon fibers or round multi-fiber cables such as ARINC 802 (annex K), Q-MTitan™ offers a dense, robust and cost-effective solution per optical channel.

Q-MTitan[™] provides a minimum of 12 optical channels in the real estate of a #8 Quadrax contact and can be used with Radiall's 10 Gbps D-Lightsys® transceivers for an impressive data rate of 120 Gbps in a single contact.

EXCELLENT PERFORMANCE[1]

• Temperature range: -55°C to +125°C

• Durability: 500 mating cycles

· Vibration: 41.7 Grms

FEATURES & BENEFITS

- Protection of the MT ferrule for a ruggedized and sealed optical multifiber connection
- Easy retrofit of single size 8 Quadrax cavity into 12 or 24 fiber optic channels
- High density optical contact compatible with ribbon and round cable
- Innovative and user friendly solution: insertion & extraction using size 8 extraction tool
- Convenient and efficient visual inspection and cleaning kits available

APPLICATIONS

- For all applications requiring high density and/or high count of Fiber Optic channels, such as:
 - Radars
 - *IFE* (*In-flight Entertainment*)
 - Displays
 - UAV



1. Cable and connector dependent

