SMP-LOCK® RANGE: SPACE APPLICATIONS

The Ultimate Secure Connection







Radiall has expanded its range of products equipped with an SMP-LOCK® interface for the Space market. The innovative SMP-LOCK® connector features a robust locking mechanism which dramatically increases the retention force of the interface and prevents accidental disconnection.

Radiall's SMP-LOCK® is a high performance interconnect solution, available at a low cost. This connector is compliant with an SMP interface and includes a unique quick locking system to simplify installation and provide a secure connection. It is a perfect alternative for SMA and SMA 2.9, since it can work up to 40 GHz and avoid any risk for bad connections during integration.

Within the space industry, performance, reliability and quality at a reduced cost are required. To meet market demands, Radiall expanded the SMP-LOCK® product offering for the space market with new connector variants, cable assemblies, attenuators, loads and switches.

Figure 1 below illustrates the mating sequence and ease of connection. The image shows the groove on the male side (receptacle) and the locking sleeve on the plug. This solution can be installed manually or with dedicated tools in more complex mating conditions.



Figure 1

FEATURES & BENEFITS

- Broad range qualified up to 22 GHz
- Easy connect and disconnect
- Audible click and visible indication that plug is locked
- No need of torque wrench
- Reduced risk of damage to equipment
- Saves integration time







SMP-LOCK®: The perfect solution when compact size and high performance are required.

TYPICAL ELECTRICAL & MECHANICAL CHARACTERISTICS

- DC to 22 GHz
- VSWR < 1.2
- EMC > 85 dBi
- · Low power: 2 W
- Mating life: > 100 cycles
- Max temperature range: -65°C to +165°C
- Random vibration: global overall level up to 50 $G_{\rm rms}$
- Mechanical shock: up to 4200 g
- Designed with venting holes

