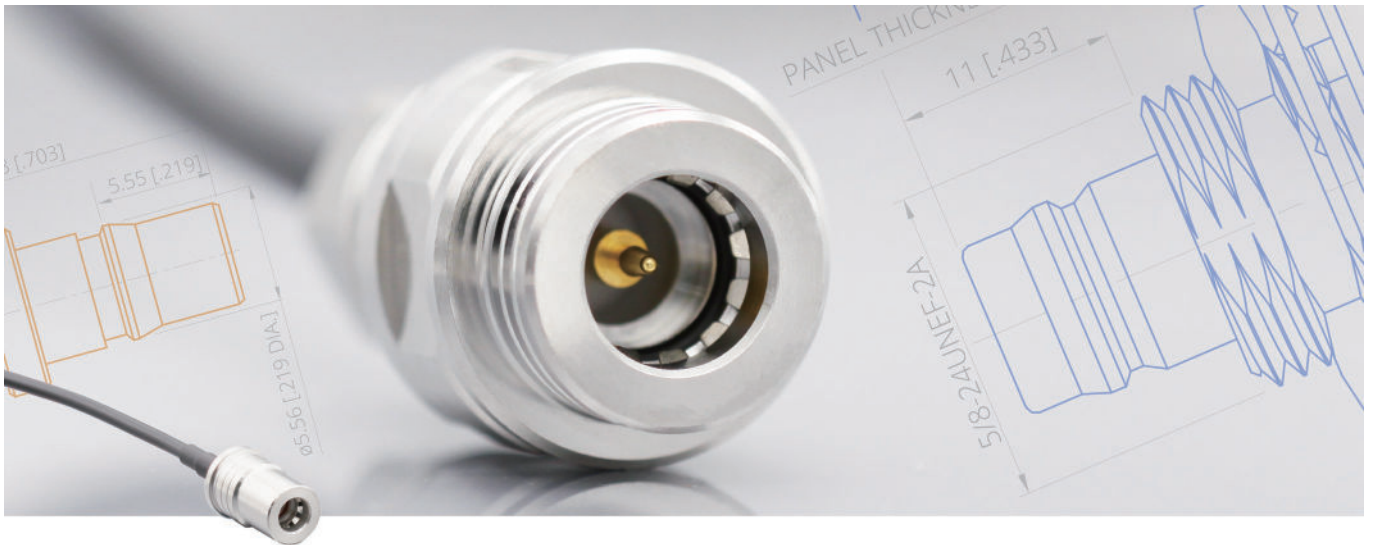


Quick-Locking RF Connectors with High Mating Cycle (5K+)

December 11, 2024 by Anoisn



While most RF connections are 'Connect and Forget', many may more accurately be called 'Connect, Disconnect, Move, Reconnect'. The latter demands what engineers refer to as "high mating cycle" connections. These are often seen in industries like oil, gas, and mining, where moving operations require reliably moving RF connections.

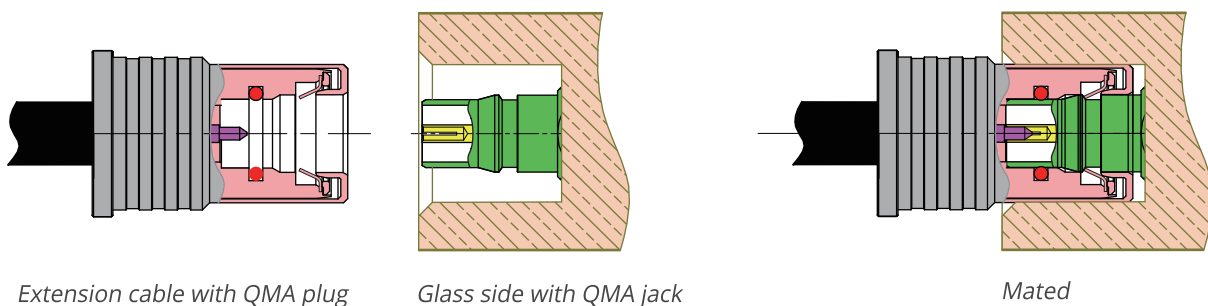
Anoisn's high-mating cycle QMA and HPQN (quick-locking) connectors are expertly engineered to deliver exceptional performance in these rigorous environments, and they are waterproof (IP68).

Case Study: Industrial Smart Glass

Iristick stands at the forefront of industrial-grade smart glasses. Their Iristick.H1 Smart Glasses are tailored for professional settings, including field services, manufacturing, telemedicine, and logistics, where safety, comfort, ruggedness, and reliability are paramount.

Iristick required waterproof quick-connect cables to seamlessly connect the lightweight head-mounted device (HMD) to their Pocket Unit, which integrates with a smartphone.

Our Anoisn QMA connectors excel in meeting this requirement. (Refer to the following demo drawing)



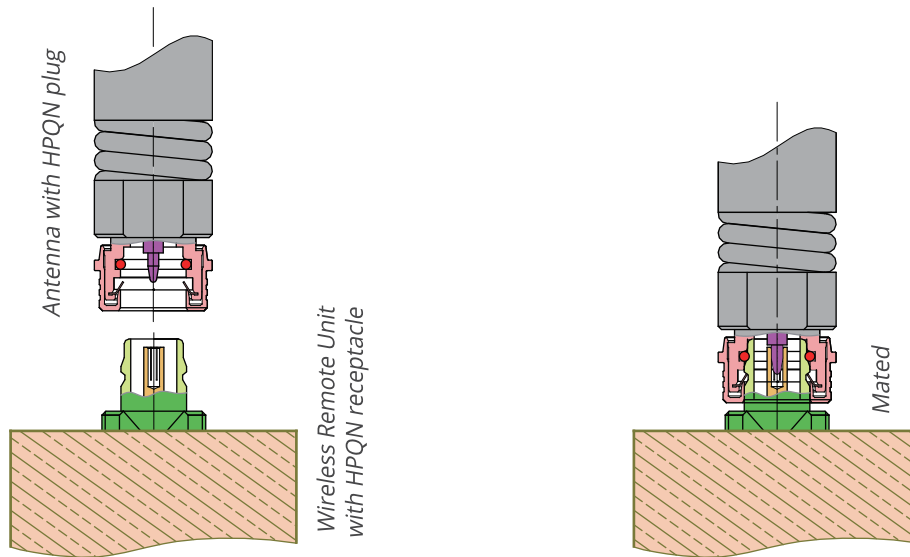
By leveraging Anoisn Electronics QMA connectors, Iristick's engineers have successfully designed cables that enable hands-free communication and real-time information sharing for Iristick.H1 users.

For more information about the Iristick.H1 Smart Glasses, click [here](#).

When Size is an Advantage

Similarly, our HPQN connectors are proven to perform in real-time data recording systems that operate under challenging conditions. They have been used in adverse conditions such as snow, freezing, outdoor use, and floating on the briny waters of the Caspian Sea.

The QMA connectors are the same size as standard SMA connectors. HPQN Connectors are essentially the same size as "N-type." While N-type requires dexterity to thread the screw-on connectors, the quick-connect design of the HPQN series allows workers, even when wearing gloves, to connect and disconnect cables. Conditions do not need to be adverse to provide the extraordinary productivity and cost savings of HPQN. (Refer to the following demo drawing)



If you have similar applications that require quick-locking connectors, high reliability, high mating cycles, or waterproof solutions, please contact us immediately for a customized solution that meets your needs!

High Mating Cycle Quick-Locking Connector Features

ITEMS	QMA	HPQN
Working Frequency (Max.)	26.5 GHz	18 GHz
Engagement Force (Typ.)	17 N	19 N
Disengagement Force (Typ.)	7 N	9 N
Mating Cycle (Min.)*	5K	10K
IP Grade	IP68	IP68
Retaining Force (Min.)	10 kg	40 kg

* Based on stainless steel jack body.

Quick-Locking Mechanism Demo

