Technical Data Sheet

RPC-TNC  Calibration Adaptor
Jack/Jack  06K121-K20S3

All dimensions are in mm; tolerances according to ISO 2768 m-H

**Interface**
- According to: IEC 61169-26

**Documents**
- Application note: AN001 “Calibration Services”

**Material and plating**

**Connector parts**
- Center conductor: CuBe
- Outer conductor: Stainless steel
- Body: Stainless steel
- Dielectric: PTFE / PPE

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**Plating**
- Gold, min. 1.27 µm, over nickel
- Passivated
Electrical data

Frequency range  DC to 18 GHz

Return loss  
\[ \geq 30 \text{ dB, DC to 4 GHz} \]
\[ \geq 20 \text{ dB, 4 GHz to 18 GHz} \]

Mechanical data

Mating cycles  \( \geq 500 \)

Maximum torque  1.70 Nm

Recommended torque  0.55 Nm

Gauge  5.18 mm to 5.28 mm

General standard definitions

For proper operation the vector network analyzer (VNA) needs a model describing the electrical behaviour of this calibration standard. The different models, units, and terms used will depend on the VNA type and they will have to be entered into the VNA. All values are based on typical geometry and plating.

Offset \( Z_0 / \text{Impedance} / Z_0 \)  50 \( \Omega \)

Offset Delay  191.799 ps

Length (electrical) / Offset Length  57.50 mm

Offset Loss  2.50 G\( \Omega \)/s

Loss  0.0416 dB/\( \sqrt{\text{GHz}} \)

Environmental data

Operating temperature range\(^1\)  +20 °C to +26 °C

Rated temperature range of use\(^2\)  0 °C to +50 °C

Storage temperature range  - 40 °C to +85 °C

RoHS compliant

\(^1\) Temperature range over which these specification are valid.

\(^2\) This range is underneath and above the operating temperature range, within the calibration adaptor is fully functional and could be used without damage.
Declaration of calibration options

Factory Calibration
Standard delivery for this calibration standard includes a Factory Calibration. The Calibration Certificate issued reports individual calibration results, traceable to Rosenberger standards, national / international standards are not available. Model based standard definitions are reported in an Agilent/Keysight, Rohde & Schwarz and Anritsu compatible VNA format.

Accredited Calibration
Not available.

For further, more detailed information see application note AN001 on the Rosenberger homepage.

Calibration interval
Recommendation 12 months

Packing
Standard 1 pce in box
Weight 58 g/pce

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