



# DATA SHEET

## 50 Ω Adapters

Kabelwerk | **EUPEN** AG

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cable

# 50 Ω Adapters

### FEATURES

- **Low reflection coefficient (up to 2.7 GHz)**
- **Fully LTE compatible**
- **Low PIM level**
- **Silver and trimetal plated**
- **Watertight (IP67/IP68)**
- **Corrosion resistant**



The adapters are designed according the standard interfaces as N, 4.3-10 or DIN 7-16. Contact components are silver or trimetal plated to minimize insertion loss and passive intermodulation products. Watertightness (mated) and corrosion resistance are ensured to resist in the toughest environmental conditions.

### ADAPTER TYPES

		interface 2					
Designations		N male	N female	7-16 male	7-16 female	4.3-10 male	4.3-10 female
interface 1	N male	ADT50NMM	ADT50NMF	ADT50NM716M	ADT50NM716F	-	ADT50NM43F
	N female		ADT50NFF	ADT50NF716M	ADT50NF716F	ADT50NF43M	ADT50NF43F
	7-16 male			ADT716MM	ADT716MF	ADT716M43M	ADT716M43F
	7-16 female				ADT716FF	ADT716F43M	ADT716F43F
	4.3-10 male					-	-
	4.3-10 female						ADT43FF

### SPECIFICATIONS

Adapter type	N to N or 4.3-10 or 7-16	4.3-10 to 4.3-10 or 7-16	7-16 to 7-16
<b>Electrical specifications</b>			
• Nominal impedance [Ω]		50	
• Reflection coefficient up to 3 GHz		Typ. ≤ 0.02	
• PIM ratio (2 x 20 W carrier) [dBc]	-	≤ -155 (Typical -163)	
• Insulation resistance [GΩ]	≥ 5	≥ 5	≥ 10
• Test voltage (at sea level) [kV rms, 50Hz]	2.5	2.5	4
• Working voltage (at sea level) [kV rms, 50Hz]	1	1	2.7
• Max. peak power [kW]	10	10	40
• Screening effectiveness up to 3 GHz [dB]		> 128	
• Contact resistance (outer contact) [mΩ]		≤ 2	
• Contact resistance (inner contact) [mΩ]		≤ 2	
<b>Mechanical specifications</b>			
• Torque of coupling mechanism [Nm]	5...8 (N and 4.3-10) 30 (7-16)	5...8 (4.3-10) 30 (7-16)	30
• Strength of coupling mechanism [N]	400 (N) 500 (4.3-10) 1000 (7-16)	500 (4.3-10) 1000 (7-16)	1000
• Mechanical endurance (Nr of couplings)	> 100	> 100	≥ 500
<b>Environmental specifications</b>			
• Temperature range	-40 °C to +85 °C (-40 °F to +185 °F)		
• Leakage testing	IP67/IP68 (mated)		
<b>Materials</b>			
• Externals parts	Passivated silver or trimetal plated or nickel plated brass		
• Outer contact	Passivated silver or trimetal plated brass		
• Inner contact	Passivated silver plated high-strength copper alloy and brass		
• Dielectric	PTFE and/or TPX		
• Gaskets	High quality silicone		