# **GORE**<sup>®</sup> Coaxial Cables

### Mil-C-17 RG Coaxial Cable

## **Improved Cable Performance from Lighter-Weight RG Coaxial Cables**

Suitable for use in commercial and military aircraft, GORE® RG Coaxial Cables maintain excellent signal integrity and are over 25 percent lighter with a more than 15 percent smaller diameter when compared to standard RG coaxial cables. The excellent flexibility and tight bend radius of these cables make them easier to install, particularly when retrofitting cables in the tight spaces surrounding aircraft electronic systems.

Engineered to meet the stringent requirements of MIL-T-81790 and EN 3475-503, GORE® RG Coaxial Cables withstand the harsh environments of the aerospace industry. In addition, the 50 ohm and 75 ohm cables are optimized to exceed the electrical requirements of MIL-C-17G.

The RG Coaxial Cables from Gore meets the environmental conditions required of standard RG Coax cables while significantly reducing the cable weight and cable size with the use of an engineered fluoropolymer jacket.

### **TYPICAL APPLICATIONS**

- Navigation systems
- Communication systems
- Box-to antenna communication
- In-flight entertainment





# Realize the Benefits of GORE<sup>®</sup> RG Coaxial Cables

- Reduced flight mass due to lighter weight construction
- Longer product life from excellent abrasion resistance
- Improved reliability with a higher operating temperature range
- Easier installation because of smaller diameter, tighter bend radius, and more flexibility
- Easier retrofit with no special connectors required
- Superior sales and technical support from Gore's worldwide engineering team



### **MECHANICAL PROPERTIES OF RG179/RG316**

Property	RG179	GWN 2907 (RG179)	RG316	GWN2908 (RG316)
	Standard	GORE	Standard	GORE
Cable nom. diameter	2.54 mm 0.100 inch	2.18 mm 0.086 inch	2.49 mm 0.098 inch	2.07 mm 0.082 inch
Weight	16.0 g/m	12.4 g/m	18.0 g/m	12.7 g/m
	10.8 lbs/1000ft	7.96 lbs/1000ft	12.2 lbs/1000ft	8.13 lbs/1000ft
Jacket material	FEP	Engineered Fluoropolymer	FEP	Engineered Fluoropolymer
Operating temperature range	-65°C up to 150°C	-65°C up to 150°C	-65°C up to 150°C-	-65°C up to 150°C
	-85F up to 302F	-85F up to 302F	85F up to 302F	-85F up to 302F

### **ELECTRICAL PROPERTIES OF RG179/RG316**

Property	RG179	GWN 2907 (RG179)	RG316	GWN2908 (RG316)
	Standard	GORE	Standard	GORE
Max. voltage	1200 V	1200V	1200V	1200V
Capacitance	63.6 pF/m	63.6 pF/m	96.43 pF/m	96.43 pF/m
	19.4 pF/ft	19.4 pF/ft	29.4 pF/ft	29.4 pF/ft
Impedance	75 <sup>+3</sup> / <sub>-3</sub> Ω	75 <sup>+3</sup> / <sub>-3</sub> Ω	$50^{+2}/_{-2}\Omega$	50 <sup>+2</sup> / <sub>-2</sub> Ω
Attenuation typical/max	dB/100feet	dB/100feet	dB/100feet	dB/100feet
@ 100 MHz min/max	8.0/9.2	8.0/9.2	7.6/11.0	7.6/11.0
@ 400 MHz min/max	15.5/21.0	15.5/21.0	16.0/21.0	16.0/21.0
@ 1.0 GHz min/max	26.7/30.7	26.7/30.7	26.2/38.0	26.2/38.0
Attenuation typical/max	dB/30m	dB/30m	dB/30m	dB/30m
@ 100 MHz min/max	7.9/9.1	7.9/9.1	7.5/10.8	7.5/10.8
@ 400 MHz min/max	15.3/20.7	15.3/20.7	15.8/20.7	15.8/20.7
@ 1.0 GHz min/max	26.3/29.6	26.3/29.6	25.8/37.4	25.8/37.4

\* other RG Coaxial Cables available - please ask us!

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