

# Insulated Wire

Founded in 1970, IW developed a unique PTFE lamination process and applied it to manufacturing wire and cable. This process allowed IW to manufacture products of unprecedented reliability along with smaller diameters, from .050" to 0.500".



[www.iw-microwave.com](http://www.iw-microwave.com)

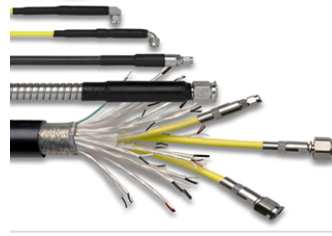
- ◆ Phase matching, amplitude matching, and time delay measurements up to 67 GHz are available when required.
- ◆ All assemblies are tested for VSWR and insertion loss before leaving the factory
- ◆ High Power cables:
  - 2801 – up to 1.9KW (c.w) @ 2 GHz
  - 4806 – up to 3.2KW (c.w) @ 1 GHz
  - customer proven to 15KW at 13.56MHz
  - 7506 – theoretical 5KW (c.w) @ 1 GHz
- ◆ 75ohm cables: 2801/75, 1801/75, 1151/75
- ◆ Low loss phase stable dielectric: 1571 cable 64dB/100ft. @ 40 GHz – 4dB/100ft. less than Micro Coax

## CHOOSE YOUR CONNECTOR

Cable Series	Frequency (GHz)									
	4	11	18	26.5	32	40	50	65	70	
115	GPO/GPPO, 1.85mm (V™), 2.4mm, 2.92mm (K™)									
125	GPO/GPPO, 1.85mm (V™)									
140	2.4mm									
150	SMA, TNCA, N, 3.5, 2.4, 2.92mm (K™)									
160	N, SMA, TNCA, SMP, K™									
170	2.92mm (K™)									
180	N, SMA, TNCA, 3.5mm, 2.92mm (K™)									
230	N, SMA, TNCA, SC, 3.5mm									
280	N, SMA, TNCA, SC									
480	N, 7/16, SC&C									
RF047	SMA, 2.92mm (K™), 2.4mm, 1.85mm (V™), GPO/GPPO									
RF085	Industry Standard 085 SR Connectors									
RF141	Industry Standard 141 SR Connectors									
RF250	SMA, TNC, N, SC									

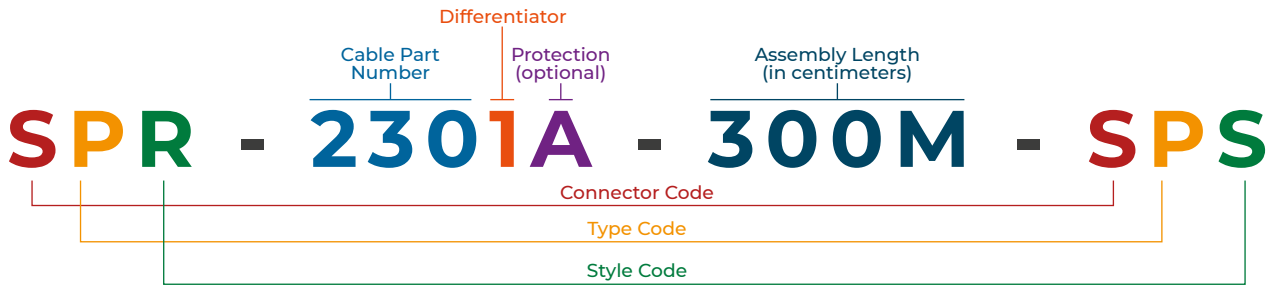
Connector types listed are preferred matching for referenced cables. Additional connector types can be provided. Please consult factory.





## CABLE ASSEMBLIES

### METRIC PART NUMBER



Note: Metric part number format is X.XX meters - 300M defines a 3m length assembly; a 10m assembly part number with the same connectors as shown above is SPR-2301A-1000M-SPS

### • Custom Solutions

In addition to our internally ruggedized cables, IW has a wide range of materials and processes designed to protect the integrity of our cable assemblies. These include a variety of metallic and non-metallic external sheaths to address your specific application. Please contact us for details.

- 1 ZEL** Tefzel Jacket
- 2 LC** Low Smoke/ Zero Halogen Polyurethane
- 3 NX** Fire resistant NOMEX\* braid \*Nomex is a registered trademark of the DuPont Corporation
- 4 A** Interlocked stainless steel armor, crush resistant up to 400 lbs per linear inch
- 5 N** Neoprene weather proof jacket
- 6 ALC** Armor with extruded Polyurethane jacket

### • Re-Flex

To provide improved electrical and mechanical performance over traditional hand-formable designs, Insulated Wire presents Re-Flex™.

Both RF085 and RF141 are industry standard line sizes, consequently a wide range of connector types and styles can be used with these cables, including: SMA, TNC, N, GPO™, GPPO™, 2.92mm/K™, 2.4mm and 1.85mm/V™, with performance up to 60GHz. RF250 is commonly used for higher power applications with SMA, TNC, N, SC and HN connectors available.



Cable part numbers are TPRFEP085, TPRFEP141 and TPRFEP250.

CABLE TYPE	MAXIMUM FREQUENCY (CABLE ONLY)	ATTENUATION (DB/FT., MAX)				BEND RADIUS (INCH)	REPLACES
		10 GHZ	18 GHZ	32 GHZ	60 GHZ		
RF085	62 GHz	0.60	0.91	1.28	2.01	0.125	RG405
RF141	32 GHz	0.41	0.60	0.88	-	0.250	RG402
RF250	19.5 GHz	0.29	0.44	-	-	0.375	RG401