TIMES MICROWAVE SYSTEMS

LMR®-900
Flexible Low Loss Communications Coax

Ideal for...

- Medium Antenna Feeder runs (no jumpers required)
- Jumper Assemblies for 1-5/8" & 2-1/4" Feeders
- Any application (e.g. WLL, GPS, LMR, WLAN, WISP, WiMax, SCADA, Mobile Antennas) requiring an easily routed, low loss RF cable



Part Description				Stock
Part Number	Application	Jacket	Color	Code
LMR-900-DB	Outdoor/Watertight	PE	Black	54094
LMR-900-FR	Indoor/Outdoor Riser CMR	FRPE	Black	54033

PVC: Poly Vinyl Chloride

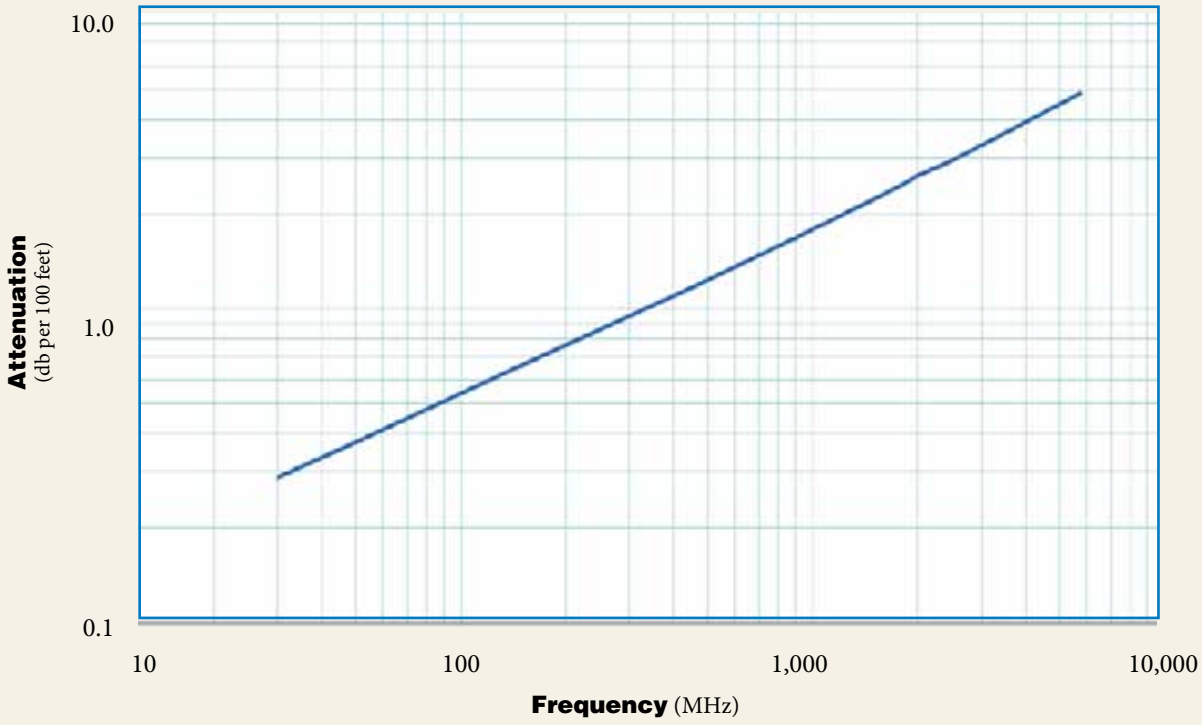
Mechanical Specifications			
Performance Property	Units	US	(metric)
Bend Radius: installation	in. (mm)	3.00	(76.2)
Bend Radius: repeated	in. (mm)	9.0	(228.6)
Bending Moment	ft-lb (N-m)	9.0	(12.20)
Weight	lb/ft (kg/m)	0.266	(0.40)
Tensile Strength	lb (kg)	750	(340.5)
Flat Plate Crush	lb/in. (kg/mm)	100	(1.79)

Construction Specifications			
Description	Material	In.	(mm)
Inner Conductor	BC Tube (.222" ID)	0.262	(6.65)
Dielectric	Foam PE	0.680	(17.27)
Outer Conductor	Aluminum Tape	0.686	(17.42)
Overall Braid	Tinned Copper	0.732	(18.59)
Jacket	(see table)	0.870	(22.10)

Environmental Specifications		
Performance Property	°F	°C
Installation Temperature Range	-40/+185	-40/+85
Storage Temperature Range	-94/+185	-70/+85
Operating Temperature Range	-40/+185	-40/+85

Electrical Specifications			
Performance Property	Units	US	(metric)
Velocity of Propagation	%	87	
Dielectric Constant	NA	1.32	
Time Delay	nS/ft (nS/m)	1.17	(3.83)
Impedance	ohms	50	
Capacitance	pF/ft (pF/m)	23.4	(76.6)
Inductance	uH/ft (uH/m)	0.058	(0.19)
Shielding Effectiveness	dB	>90	
DC Resistance			
Inner Conductor	ohms/1000ft (/km)	0.54	(1.77)
Outer Conductor	ohms/1000ft (/km)	0.55	(1.8)
Voltage Withstand	Volts DC	5000	
Jacket Spark	Volts RMS	8000	
Peak Power	kW	62	

Attenuation vs. Frequency (typical)



Frequency (MHz)	30	50	150	220	450	900	1500	1800	2000	2500	5800
Attenuation dB/100 ft	0.3	0.4	0.7	0.8	1.2	1.7	2.2	2.5	2.6	3.0	4.9
Attenuation dB/100 m	0.9	1.2	2.2	2.6	3.8	5.6	7.4	8.2	8.6	9.8	16.0
Avg. Power kW	8.89	6.85	3.89	3.19	2.19	1.51	1.14	1.03	0.97	0.86	0.52

Calculate Attenuation =
$(0.051770) \cdot \sqrt{FMHz} + (0.000160) \cdot FMHz$ (interactive calculator available at http://www.timesmicrowave.com/cable_calculators)

Attenuation:
VSWR=1.0 ; Ambient = +25°C (77°F)

Power:
VSWR=1.0; Ambient = +40°C; Inner Conductor = 100°C (212°F); Sea Level; dry air; atmospheric pressure; no solar loading

TIMES MICROWAVE SYSTEMS

LMR®-900
Flexible Low Loss Communications Coax















Connectors

Interface	Description	Part Number	Stock Code	VSWR Freq. (GHz)	**Coupling Nut	Inner Contact Attach	Outer Contact Attach	Finish* Body /Pin	Length in (mm)	Width in (mm)	Weight lb (g)
1. 7-16 DIN Female	Straight Jack	EZ-900-716FC-2	3190-1550	<1.25:1 (2.5)	NA	Press Fit	Clamp	S/S	2.0 (51)	1.38 (35.1)	0.379 (171.9)
2. 7-16 DIN Male	Straight Plug	EZ-900-716MC-2	3190-1641	<1.25:1 (2.5)	Hex	Press Fit	Clamp	S/S	2.0 (51)	1.44 (36.6)	0.485 (220.0)
3. 7-16 DIN Male	Right Angle	EZ-900-716-MC-RA	3190-614	<1.35:1 (2.5)	Hex	Press Fit	Clamp	S/S	2.7 (69)	2.15 (55.0)	1.150 (521.6)
4. 7/8 EIA Male	Straight Plug	EZ-900-78EIA-2	3190-1282	<1.25:1 (2.5)	NA	Press Fit	Clamp	S/S	3.0 (76)	2.24 (56.9)	1.013 (459.5)
5. 7/8 EIA Male	Right Angle	EZ-900-78EIA-RA	3190-1450	<1.25:1 (1)	Flange	Press Fit	Clamp	S/S	2.95 (75.0)	2.60 (66.0)	1.50 (680.4)
6. N Female	Straight Jack	EZ-900-NFC-2	3190-1263	<1.25:1 (6)	NA	Press Fit	Clamp	S/S	2.0 (51)	1.38 (35.1)	0.443 (200.9)
7. N Male	Straight Plug	EZ-900-NMC-2	3190-1262	<1.25:1 (6)	Hex/Knurl	Press Fit	Clamp	S/S	2.0 (51)	1.38 (35.1)	0.463 (210.0)

* Finish metals: N=Nickel, S=Silver, G=Gold, SS=Stainless Steel, A=Alballoy **VSWR spec based on 3 foot cable with a connector pair









Install Tools

Type	Part Number	Stock Code	Description
Strip Tool	ST-900C	3190-1310	For LMR 900 Clamp Style Connectors
Midspan Strip Tool	GST-900A	3190-435	For Ground Strap Attachment
Wrenches	WR-900	3190-509	1-1/4" Box Wrench (2 required)
Cutting Tool	CCT-02	3192-165	Cable end flush cut tool
Replacement Blade	RB-02	3192-166	Replacement blade for cutting tool


GK-S900TT


HG-900T


CS-A900T, CS-90120T, CS-90170T


SC-900T


Standard Entry Panels


CB-900T


Hanger Block Hardware


SH-U900T

Accessories

Type	Part Number	Stock Code	Description
Ground Kit	GK-S900TT	GK-S900TT	Standard Grounding Kit (each)
Hoisting Grip	HG-900T	HG-900T	Split/Laced Type (each)
Cold Shrink	CS-A900T	CS-A900T	Cable to Antenna Junction (each)
Cold Shrink	CS-90120T	CS-90120T	LMR-900 to -1200 Junction (each)
Cold Shrink	CS-90170T	CS-90170T	LMR-900 to -1700 Junction (each)
Stand. Entry Port Cushion	SC-900T-3	SC-900T-3	Three Cables (each)
Standard Entry Panels			Full Range of Port Styles/Combinations Available
Hanger Blocks	CB-900T	CB-900T	Dual Cable Support Block (kit of 10)
Hanger Block Supporting Hardware			Complete Range of Supporting Hardware & Adapters Available
Snap-in Hangers	SH-U900T	SH-U900T	Snap-in Hanger (Kit of 10)