

# TWS-240FR-M (Fire Retardant) Bulk Coaxial Cable

TerraWave's TWS-240FR-M series cable is non-halogenated, low smoke, fire retardant cable that is designed for easy installation. With maximum flexibility where curves, bends and twists exist, our cable eliminates the need for hard-line transmission cables. In addition, our 240FR-M cable has the added benefit of being MSHA tested and approved for safe and reliable use in underground mining applications where critical safety standards apply. It is designed for any indoor, non-plenum application requiring high-quality, flexible cabling such as WLL, GPS, WLAN, WISP, WiMAX, SCADA and mobile applications. TerraWave's cable is compatible with a wide variety of TerraWave connectors and is can be used for an off-the-shelf cable assembly or customized cable assembly. For questions or to purchase product, contact your Regional Sales Executive at 210-375-8482, 800-851-4965 or sales@terra-wave.com.



TESSCO SKU: 324598  
TerraWave Part Number: TWS-240FR-M

Construction Specifications		
	Material	Diameter
Inner Conductor	Solid Copper	0.056"
Dielectric	Physical Foam Polyethylene	0.15"
Outer Conductor	Bonded Aluminum Foil + Tinned Copper Braid	Nominal 0.178"
Jacket	Black FR Polyethylene	0.24"

Electrical Characteristics	
Capacitance	24.2 pF/ft
Impedance	50 Ω
Velocity	84%
Inner Conductor DC Resistance	< 3.7 (Ω/1000 ft)
Outer Conductor DC Resistance	< 3.89 (Ω/1000 ft)
Shielding Effectiveness	> 90 dB
Inductance	0.060 μH/ft
Jacket Spark	5000 VAC
Cut off Frequency	31 GHz
Peak Power	5.6 kW
Return Loss	≤ -18 dB (0.03-3000 MHz)

Mechanical and Environmental Characteristics	
Installation Bend Radius	0.752"
Repeated Bend Radius	2.5"
Weight	0.034 lb/ft
Operating Temperature	-40° F to +185° F
Installation Temperature	-40° F to +185° F
Storage Temperature	-94° F to +185° F

General Information	
Warranty	7 Years
Life Expectancy	20 Years (Outdoor Use)

U.S. DEPARTMENT OF LABOR  
**MSHA CERTIFIED**  
P-07-KA080017-MSHA  
MINE SAFETY & HEALTH ADMINISTRATION



Attenuation (68° F) and Avg. Power (104°F) At Sea Level			
Frequency MHz	Typical Attenuation dB/100 ft	Max Attenuation dB/100 ft	Average Power kW
30	1.3	1.50	1.49
50	1.7	1.87	1.15
150	3.0	3.40	0.66
220	3.7	4.18	0.54
450	5.3	5.95	0.38
700	6.6	7.43	0.29
750	6.9	7.78	0.28
800	7.1	8.02	0.27
900	7.6	8.58	0.26
1500	9.9	11.18	0.20
1800	10.9	12.30	0.18
2000	11.5	13.00	0.17
2500	12.9	14.55	0.15
5800	20.4	23.00	0.10

## > Connectors for TWS-240FR-M Series Cable

TESSCO SKU	TerraWave Part Number	Product Description
354039	CON-01-240	RPTNC Jack (F)
394461	CON-02-240	RPTNC Plug (M)
394258	CON-04-240	TNC Jack (F)
384028	CON-05-240	TNC Plug (M)
354507	CON-06-240	N-Style Jack (F)
373491	CON-07-240	N-Style Plug (M)
374477	CON-11-240	BNC Jack (F)
384862	CON-12-240	BNC Plug (M)

TESSCO SKU	TerraWave Part Number	Product Description
344496	CON-13-240	RPBNC Jack (F)
344757	CON-14-240	RPBNC Plug (M)
304759	CON-17-240	SMA Jack (F)
315399	CON-18-240	SMA Plug (M)
304340	CON-19-240	RPSMA Jack (F)
364735	CON-20-240	RPSMA Plug (M)
394980	CON-30-240	RPSMA BH Jack (F)
394841	CON-35-240	UHF Plug (M)

TESSCO SKU	TerraWave Part Number	Product Description
349804	CON-01-240-CP	RPTNC Jack (M) with CCP
319200	CON-02-240-CP	RPTNC Plug (F) with CP
348825	CON-07-240-CP-HEX	N-Style Plug (M) Hex Head with CP
318734	CON-18-240-CP	SMA Plug (M) with CP
368720	CON-18RA-240-CP	Right Angle SMA Plug (M) with CP
368587	CON-19-240-CP	RPSMA Jack (M) with CP
338804	CON-20-240-CP	RPSMA Plug (F) with CP



## > Tools for TWS-240FR-M Series Cable

TESSCO SKU	TerraWave Part Number	Description
487941	HT-336A	Crimp Tool for TWS-195, TWS-200 & TWS-240



## > Connector Adapters for TWS-240FR-M Series Cable

TESSCO SKU	TerraWave Part Number	Product Description
323264	RARPTNCJ-RPTNCP	RA RPTNC Jack (F) to RPTNC Plug (M)
467986	RPTNCJACK-NPLUG	RPTNC Jack (F) to N-Style Plug (M)
413999	RPTNCP-NJ	RPTNC Plug (M) to N-Style Jack (F)
424971	RPTNCP-NP	RPTNC Plug (M) to N-Style Plug (M)
315485	RPTNCP-RPSMAJ	RPTNC Plug (M) to RPSMA Jack (F)
424995	NJACK-NJACK	N-Style Jack to N-Style Jack (F)
485981	NM-NM	N-Style Plug (M) to N-Style Plug (M)
312060	SMAP-TNCJ	SMA Plug (M) to TNC Jack (F)
437905	AXA-SMSM	SMA Jack (F) to SMA Jack (F)



N-Style Plug (M) to  
N-Style Plug (M)



RA RPTNC Jack (F)  
to RPTNC Plug (M)