

45,3% lighter  
than average 10,3 mm  
full copper cables



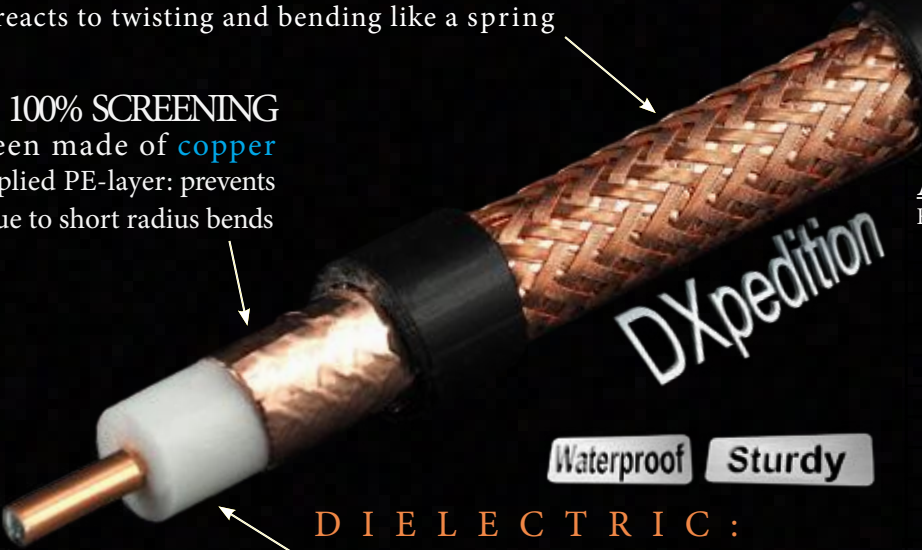
19dB @ 2400 Mhz  
by far the most performant  
of its class (10,3 mm cables)

# M&P AIRBORNE 10 /,400"

**J A C K E T :**  
UV shielded polyethylene  
for direct burial and outdoor use  
overall Ø 10,3mm ± 0,15  
(0.405 inches ± 0.0059)

**REACTIVE BRAID :**  
85% SCREENING - 192 wires of copper clad aluminium  
made with 24 spool machines (instead of 16). Thanks to 50%  
more crossovers, grants exceptional Screening Attenuation  
(SA) and reacts to twisting and bending like a spring

**FOIL: 100% SCREENING**  
First screen made of copper  
with an applied PE-layer: prevents  
cracking due to short radius bends



Waterproof Sturdy

**DIELECTRIC :**  
High pressure physical injection  
foamed polyethylene  
TRIPLE LAYER  
overall Ø 7,3 mm ± 0,05 (0,287 inch. ± 0,0019)

**INNER CONDUCTOR :**  
made of copper clad aluminium  
overall Ø 2,78 mm ± 0,05 (Ø 0.109 inches ± 0.0019)

**ATTENUATION (20°C /68°F)**

FREQUENCY	dB/100m	dB/100ft
1,8 MHz	0,6	0,2
3,5 MHz	0,8	0,2
7 MHz	1,0	0,3
10 MHz	1,2	0,3
14 MHz	1,3	0,4
21 MHz	1,7	0,5
28 MHz	1,9	0,5
50 MHz	2,4	0,7
100 MHz	3,5	1,0
144 MHz	4,2	1,2
200 MHz	5,0	1,5
400 MHz	7,2	2,1
430 MHz	7,6	2,3
800 MHz	10,4	3,1
1000 MHz	11,8	3,6
1296 MHz	13,6	4,1
2400 MHz	19,2	5,8
3000 MHz	21,6	6,5
4000 MHz	25,6	7,8
5000 MHz	29,2	8,9
6000 MHz	32,8	10,0
7000 MHz	35,6	10,8
8000 MHz	38,6	11,7
10.000 MHz	44,6	13,5
12.000 MHz	50,2	15,3

**ELECTRICAL DATA**

Impedance @200Mhz: 50 Ohm ± 3

Minimum bending radius: { up to 15 bends: 103mm (4.05 in)  
single bend (choke): 65mm (2.56 in)

Temperature: -45°C to +70°C (-49°F to +158°F)

Capacitance: 74 pF/m ± 2 (22.6 pF/ft ± 2)

Velocity ratio: 87%

Screening Efficiency (SA) 100-2000 MHz >105 dB

Screening Class: A++

Inner conductor resistance: 4,4 Ohm/Km (1.3 Ohm/1000ft)

Outer conductor resistance: 12 Ohm/Km (3.7 Ohm/1000ft)

Tension test (spark test): 8 kV

Net weight (100m/100ft): 7,1 Kg (4.8 lb)

Maximum peak power: 14.500 WATT

Connectors: UHF (PL), N, BNC, SMA, TNC, 7/16

**SRL**

0,3-600 MHz >30 dB  
600-1200 MHz >25 dB  
1200-2000 MHz >20 dB

**POWER HANDLING (40°C/104°F)**

FREQUENCY	MAX P.	FREQUENCY	MAX P.
1,8 MHz	10831 W	430 MHz	944 W
3,5 MHz	8471 W	800 MHz	692 W
7 MHz	6667 W	1000 MHz	610 W
10 MHz	6000 W	1296 MHz	529 W
14 MHz	5180 W	2400 MHz	375 W
21 MHz	4114 W	3000 MHz	333 W
28 MHz	3731 W	4000 MHz	281 W
50 MHz	2939 W	5000 MHz	247 W
100 MHz	2045 W	6000 MHz	220 W
144 MHz	1710 W	7000 MHz	202 W
200 MHz	1440 W	8000 MHz	187 W
400 MHz	992 W	10.000 MHz	161 W

## WHY CHOOSE THIS CABLE

- Best attenuation tested in a 10,3mm coax , boosting 19dB/100m at 2400 Mhz.
- Suitable for direct burial and totally waterproof.
- Also perfect for outdoor use and weatherproof.
- Superlative robustness and resistance thanks to the PE tearproof sheath.
- Incredible lightness: 45% lighter than average 10,3mm cable.
- Super thick braid of 192 wires that leads to a dramatic reduction of the background noise.

## FREQUENCY SUGGESTIONS

### HF (from 3MHz to 30Mhz)

#### example at 14 MHz

**EXCELLENT** up to 100m of cable length

**GOOD** up to 160m of cable length

**Choose Ø 12,7mm cable** above 160m

#### example 28 MHz

**EXCELLENT** up to 75m of cable length

**GOOD** up to 120m of cable length

**Choose Ø 12,7mm cable** above 120m

### VHF (from 30MHz to 300Mhz)

#### example at 50 Mhz

**EXCELLENT** up to 60m of cable length

**GOOD** up to 80m of cable length

**Choose Ø 12,7mm cable** above 80m

#### example at 144 Mhz

**EXCELLENT** up to 35m of cable length

**GOOD** up to 60m of cable length

**Choose Ø 12,7mm cable** above 60m

### UHF (from 300MHz to 3000Mhz)

#### example at 430 MHz

**EXCELLENT** up to 20m of cable length

**GOOD** up to 30m of cable length

**Choose Ø 12,7mm cable** above 28m

#### example at 1296 MHz

**EXCELLENT** up to 12m of cable length

**GOOD** up to 18m of cable length

**Choose Ø 12,7mm cable** above 17m

#### example at 2400 MHz

**EXCELLENT** up to 8m of cable length

**GOOD** up to 12m of cable length

**Choose Ø 12,7mm cable** above 12m

\*data valuable for Power Application (trasmission)

\*\*you can find Watt / MAX POWER in the datasheet above.



## RESIDUAL POWER PERCENTAGE (Cable Run Efficiency)

Given a power fed to the X value (any value expressed in Watts), the actual power output of the cable is shown in the table in the form of remaining percentage. (for example, if we use a cable such as M&P-AIRBORNE 10, entering 1000 Watts over a length of 35m, at a frequency of 144 MHz, there remains 71.2% of 1000). **For maximum applicable power, see the Power Handling of the cable concerned.** From these values, have already been deducted the SRL values, typical of each one of our models, for the respective frequencies. **REMEMBER: Make sure to match the line accurately!**

		M&P-AIRBORNE 10 / .400"													
feet		16,4	32,8	49,2	65,6	82	114,8	164	246	328	426,5	524,9	656,2	984,2	
meters		5	10	15	20	25	35	50	75	100	130	160	200	300	
Wave length	MHz	Useful signal output (residual power %)													
85.71 m	3,5	98,9	98,0	97,0	96,1	95,1	93,3	90,6	86,2	82,1	77,4	73,0	67,5	55,5	
42.85 m	7	98,7	97,4	96,2	95,0	93,9	91,6	88,2	82,9	77,9	72,3	67,1	60,7	47,3	
21.42 m	14	98,3	96,8	95,2	93,7	92,2	89,3	85,1	78,6	72,5	65,9	59,8	52,6	38,2	
10.71 m	28	97,7	95,6	93,5	91,4	89,4	85,5	80,0	71,6	64,0	56,0	49,0	41,0	26,3	
6 m	50	97,1	94,4	91,8	89,2	86,7	82,0	75,3	65,4	56,8	47,9	40,5	32,3	18,3	
2 m	144	95,2	90,7	86,4	82,3	78,4	71,2	61,6	48,3	37,9	28,3	21,2	14,4	5,4	
69 cm	430	91,5	83,8	76,8	70,3	64,4	54,0	41,5	26,8	17,2	10,1	5,9			
23.1 cm	1296	84,9	72,5	61,9	52,8	45,1	32,8	20,3	8,9	3,7					
12.5 cm	2400	78,6	62,7	49,9	39,7	31,5	19,7	9,4							
10 cm	3000	76,4	59,2	45,8	35,4	27,3	16,0	6,7							
7.5 cm	4000	72,9	53,9	39,7	29,2	21,3	11,1	3,7							
6 cm	5000	69,5	49,1	34,5	24,1	16,6	7,5								
5 cm	6000	66,6	45,0	30,2	20,1	13,1	5,1								
3.75 cm	8000	61,0	38,0	24,4	13,7	7,7									
3 cm	10.000	49,8	25,8	11,4											
2.5 cm	12.000	46,1	21,5	7,7											

## M&P-AIRBORNE 10 / .400" Power Handling/Temperature (in Continuous Carrier)

Wave length	MHz	Temperature C° / F°									
		-10 / 14	-5 / 23	0 / 32	10 / 50	20 / 68	30 / 86	40 / 104	50 / 122	60 / 140	70 / 158
166.66 m	1,8	13300	13300	13300	13300	12900	12174	10831	9239	7647	6065
85.71 m	3,5	13112	12672	12299	11520	10605	9521	8471	7225	5980	4744
42.85 m	7	10320	9973	9680	9067	8347	7493	6667	5687	4707	3733
30 m	10	9288	8976	8712	8160	7512	6744	6000	5118	4236	3360
21.42 m	14	8018	7749	7521	7045	6485	5822	5180	4418	3657	2901
14.28 m	21	6369	6155	5974	5595	5151	4624	4114	3509	2905	2304
10.71 m	28	5775	5581	5417	5074	4671	4193	3731	3182	2634	2089
6 m	50	4549	4396	4267	3997	3679	3303	2939	2507	2075	1646
3 m	100	3166	3060	2970	2782	2561	2299	2045	1745	1444	1145
2.08 m	144	2647	2558	2483	2326	2141	1922	1710	1459	1207	958
1.5 m	200	2229	2154	2091	1958	1803	1619	1440	1228	1017	806
75 cm	400	1535	1484	1440	1349	1242	1115	992	846	700	555
69 cm	430	1461	1412	1370	1283	1181	1061	944	805	666	528
37.5 cm	800	1072	1036	1005	942	867	778	692	591	489	388
30 cm	1000	945	913	886	830	764	686	610	520	431	342
23.1 cm	1296	820	792	769	720	663	595	529	452	374	296
12.5 cm	2400	581	561	545	510	470	422	375	320	265	210
10 cm	3000	516	499	484	453	417	375	333	284	235	187
7.5 cm	4000	435	421	408	383	352	316	281	240	199	158
6 cm	5000	382	369	358	335	309	277	247	210	174	138
5 cm	6000	340	328	319	299	275	247	220	187	155	123
4.2 cm	7000	313	303	294	275	253	227	202	173	143	113
3.75 cm	8000	289	279	271	254	234	210	187	159	132	104
3.3 cm	9000	269	260	252	236	217	195	173	148	122	97
3 cm	10.000	250	242	234	220	202	181	161	138	114	90

Do not use the cable as power supply for both direct current and 50-60 Hz mains



# GENERIC COAXIAL CABLE APPLICATIONS\*

- Aircraft communications
  - Amateur Radio
  - Antenna
  - Antenna Analyzer
  - Beacons Base Station
  - Broadcast Radios
  - CB Radio (Citizen Band)
  - CB Radio Scanner
  - Dummy Load
  - Land Mobile Communications
  - Maritime Mobile Communications
  - Military Communications
  - Microwave Relay System
  - Moon Bouncing Transmission EME
  - Mobile Transmission Applications (Car, Van, Caravans, Trucks, etc.)
  - Motorhome
  - Network Analyzer
  - Portable Handheld Radio (Walkie Talkie - PMR antenna extension)
  - Radar
  - Radio Astronomy and Telescope
  - Radio Receivers
  - Router connections
  - Satellite Radio
  - Scanner
  - Switch connections
  - SWR Meter connections
  - Transceiver
  - Tuner connections
  - Weather Radio Antenna Extension
- \*See "Frequency Suggestions" for a correct correlation

## PRE-ASSEMBLED COAX JUMPERS

YOU'VE NO TIME FOR ASSEMBLING THE CONNECTORS YOURSELF?  
GRAB OUR FACTORY MADE COAX JUMPERS "LAB TESTED" ONE BY ONE!  
LAB CERTIFICATE ENCLOSED IN EACH PACKAGING.



## USEFUL ACCESSORIES



SPECIAL COAX SCISSORS



ADHESIVE REUSABLE  
VELCRO



CABLE PULLING LUBRICANT



M&P T-SHIRT



UNWINDERS FOR COILS AND BOBBINS



# CONNECTORS for 10,3mm (.400") Coaxial Cables

**EVO**lution



## “UHF” (PL-259) Male Solder

Watch the Assembly

**Video:**

<https://youtu.be/35SWUllkVjw>

**Code:**

CO.UHF.10M-S EVO



## “UHF” (PL-259) Female Solder

Watch the Assembly

**Video:**

[https://youtu.be/vVuTp\\_wYSio](https://youtu.be/vVuTp_wYSio)

**Code:**

C.UHF.BROAD50F-S



## “UHF” Male Solder - 90° Angle

Watch the Assembly

**Video:**

<https://youtu.be/qQoZT4TqF4w>

**Code:**

C.UHF.BROAD50-M90



## “PL259” Male Solder (standard)

Watch the Assembly

**Video:**

[https://youtu.be/DWIKgl62M\\_8](https://youtu.be/DWIKgl62M_8)

**Code:**

C.BROAD.PL259



## “N” Male Solder

Watch the Assembly

**Video:**

<https://youtu.be/c6Z8jHE3gC4>

**Code:**

CO.N.10M-S



## “N” Female Solder

Watch the Assembly

**Video:**

<https://youtu.be/P18ViE8Exhk>

**Code:**

C.N.BROAD50-FS



## “N” Male Solderless

Watch the Assembly

**Video:**

<https://youtu.be/SexpyifQn6Y>

**Code:**

C.N.BROAD50-SL



## “N” Female Solderless

Watch the Assembly

**Video:**

<https://youtu.be/RJdiLYtpBk>

**Code:**

C.N.BROAD50-FSL



## “N” Male Solder - 90° Angle

Watch the Assembly

**Video:**

<https://youtu.be/8NYoa-v7h74>

**Code:**

C.N.BROAD50-M90

# CONNECTORS for 10,3mm (.400") Coaxial Cables



## "N" Male Crimp

Watch the Assembly

**Video:**

<https://youtu.be/sggjEZKue8k>

**Code:**

C.N.BROAD50-MCR



## "N" Female Crimp

Watch the Assembly

**Video:**

<https://youtu.be/l9jgcDznJlo>

**Code:**

C.N.BROAD50-FCR



## "BNC" Male Solder

Watch the Assembly

**Video:**

<https://youtu.be/tsaUjVnlPkl>

**Code:**

C.BNC.BROAD50-M



## "BNC" Female Solder

Watch the Assembly

**Video:**

<https://youtu.be/46SLt5mODjg>

**Code:**

C.BNC.BROAD50-FS



## "TNC" Male Solder

Watch the Assembly

**Video:**

<https://youtu.be/A-ayPwR-epY>

**Code:**

C.TNC.BROAD50-MS



## "TNC" Male Crimp

Watch the Assembly

**Video:**

<https://youtu.be/X1QgKRtiesk>

**Code:**

C.TNC.BROAD50-CR



## "SMA" Male Solder

Watch the Assembly

**Video:**

[https://youtu.be/whXmqoRqj\\_o](https://youtu.be/whXmqoRqj_o)

**Code:**

C.SMA.UF10M-S



7/16

Watch the Assembly

**Video:**

<https://youtu.be/CK1zZ7Agi4U>

**Code:**

C.7-16.10M-S

## HEAT SUPPRESSOR

Pairing to our "N" or "UHF" connectors, the Heat Suppressor represents an extension of the operational life of your valuable cables and a greater homogeneity of their performance in hot environments.

The benefits will also be more evident for those who use high power linear amplifiers for prolonged periods during contests.

Cooling and stabilizing the cable, could be the ace in your sleeve!



For other connectors and adapters, visit [www.messi.it](http://www.messi.it) or contact us at [web@messi.it](mailto:web@messi.it)