

1,4 Kg/100m
lighter than RG58

3,6 dB/100m better
@50 MHz than RG58

M&P
AIRBORNE 5
(H2005) **1.200"**



JACKET :
UV shielded **polyethylene**
for direct burial and outdoor use
overall Ø 5mm ± 0,15
(0.197 inches ± 0.0059)

REACTIVE BRAID :
84% SCREENING - 96 wires of **aluminium magnesium**
Strong and lightweight braid for an ultimate result of toughness and reliability, under a structural and Screening Attenuation (SA) point of view

ATTENTION: use only our connectors as with this sort of braid, no soldering is allowed!



FOIL: 100% SCREENING
First screen made of **aluminium - polyester - aluminium**: prevents cracking due to short radius bends

Waterproof Sturdy

DIELECTRIC :
High pressure physical injection **foamed polyethylene**
TRIPLE LAYER
overall Ø 3 mm ± 0,05 (0.118 inches ± 0.0019)

INNER CONDUCTOR :
made of 99,9% pure bare **copper**
overall Ø 1,13 mm ± 0,05 (Ø 0.044 inches ± 0.0019)

ELECTRICAL DATA

Impedence @200Mhz: 50 Ohm ± 3

Minimum bending radius: { up to 15 bends: 50mm (1.97 in)
single bend (choke): 25mm (0.98 in)

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

Capacitance: 76 pF/m ± 2 (23.2 pF/ft ± 2)

Velocity ratio: 85%

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

Screening Class: A++

Inner conductor resistance: 17 Ohm/Km (5.2 Ohm/1000ft)

Outer conductor resistance: 34 Ohm/Km (10.4 Ohm/1000ft)

Tension test (spark test): 8 kV

Net weight (100m/100ft): 2,3 Kg (1.5 lb)

Maximum peak power: 2.000 WATT

Connectors: UHF (PL), N, BNC, SMA, TNC

SRL
0,3-600 MHz >30 dB
600-1200 MHz >28 dB
1200-2000 MHz >25 dB

ATTENUATION (20°C/68°F)

| FREQUENCY | dB/100m | dB/100ft |
|-----------|---------|----------|
| 1,8 MHz | 1,7 | 0,5 |
| 3,5 MHz | 2,3 | 0,7 |
| 7 MHz | 3,0 | 0,9 |
| 10 MHz | 3,4 | 1,0 |
| 14 MHz | 4,0 | 1,2 |
| 21 MHz | 4,8 | 1,4 |
| 28 MHz | 5,5 | 1,6 |
| 50 MHz | 7,1 | 2,1 |
| 100 MHz | 9,4 | 2,8 |
| 144 MHz | 11,1 | 3,3 |
| 200 MHz | 12,8 | 3,9 |
| 400 MHz | 18,3 | 5,6 |
| 430 MHz | 19,0 | 5,7 |
| 800 MHz | 26,5 | 8,1 |
| 1000 MHz | 29,8 | 9,1 |
| 1296 MHz | 34,2 | 10,4 |
| 2400 MHz | 47,5 | 14,5 |
| 3000 MHz | 53,5 | 16,3 |
| 4000 MHz | 61,0 | 18,5 |
| 5000 MHz | 68,6 | 20,9 |
| 6000 MHz | 75,6 | 23,0 |

POWER HANDLING (40°C/104°F)

| FREQUENCY | MAX P. | FREQUENCY | MAX P. |
|-----------|--------|-----------|--------|
| 1,8 MHz | 1172 W | 400 MHz | 102 W |
| 3,5 MHz | 837 W | 430 MHz | 99 W |
| 7 MHz | 625 W | 800 MHz | 71 W |
| 10 MHz | 543 W | 1000 MHz | 63 W |
| 14 MHz | 471 W | 1296 MHz | 55 W |
| 21 MHz | 394 W | 2400 MHz | 39 W |
| 28 MHz | 346 W | 3000 MHz | 35 W |
| 50 MHz | 268 W | 4000 MHz | 31 W |
| 100 MHz | 198 W | 5000 MHz | 27 W |
| 144 MHz | 170 W | 6000 MHz | 25 W |
| 200 MHz | 146 W | | |



WHY CHOOSE THIS CABLE

- best 5mm (.200”) coaxial cable available.
- 3,6dB/100m less at 50MHz than RG58 C/U.
- suitable for direct burial and totally waterproof.
- perfect for outdoor use and weatherproof.
- superlative resistance thanks to the PE tearproof sheath.
- incredible lightness: 1,4Kg x 100m less than RG58 C/U.

FREQUENCY SUGGESTIONS

HF (from 3MHz to 30Mhz)

example at 14 MHz

EXCELLENT up to 25m of cable length

GOOD up to 40m of cable length

Choose a bigger cable above 40m:

example 28 MHz

EXCELLENT up to 15m of cable length

GOOD up to 35m of cable length

Choose a bigger cable above 35m

VHF (from 30MHz to 300Mhz)

example at 50 Mhz

EXCELLENT up to 12m of cable length

GOOD up to 28m of cable length

Choose a bigger cable above 30m

example at 144 Mhz

EXCELLENT up to 8m of cable length

GOOD up to 15m of cable length

Choose a bigger cable above 15m

UHF (from 300MHz to 3000Mhz)

example at 430 MHz

GOOD up to 3m of cable length

Choose a bigger cable above 3m

example at 1296 MHz

Choose Ø 10,3mm or Ø 12,7mm cable

example at 2400 MHz

Choose Ø 10,3mm or Ø 12,7mm cable

*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 5, entering 1000 Watts over a length of 35m, at a frequency of 144 MHz, there remains 41.1 % 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 5 /.200" | | | | | | | | | | | | | |
|-------------|---------|---|------|------|------|------|-------|------|------|------|-------|-------|-------|-------|------|
| 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 %) | | | | | | | | | | | | | |
| Frequencies | 85.71 m | 3,5 | 97,4 | 94,9 | 92,5 | 90,1 | 87,8 | 83,4 | 77,2 | 67,8 | 59,6 | 51,0 | 43,7 | 35,5 | 21,2 |
| | 42.85 m | 7 | 96,5 | 93,2 | 90,1 | 87,0 | 84,0 | 78,4 | 70,7 | 59,5 | 50,0 | 40,6 | 33,0 | 25,0 | 12,5 |
| | 21.42 m | 14 | 95,4 | 91,1 | 87,1 | 83,2 | 79,4 | 72,5 | 63,1 | 50,2 | 39,9 | 30,3 | 23,0 | 15,9 | 6,3 |
| | 10.71 m | 28 | 93,9 | 88,2 | 82,8 | 77,8 | 73,1 | 64,5 | 53,5 | 39,1 | 28,6 | 19,6 | 13,5 | 8,1 | |
| | 6 m | 50 | 92,2 | 85,0 | 78,4 | 72,3 | 66,7 | 56,8 | 44,6 | 29,8 | 19,9 | 12,2 | 7,5 | 3,9 | |
| | 2.08 m | 144 | 88,0 | 77,5 | 68,3 | 60,2 | 53,0 | 41,1 | 28,1 | 14,9 | 7,8 | 3,6 | | | |
| | 69 cm | 430 | 80,2 | 64,4 | 51,7 | 41,5 | 33,3 | 21,5 | 11,0 | 3,6 | | | | | |
| | 23.1 cm | 1296 | 66,8 | 44,9 | 30,1 | 20,1 | 13,3 | 5,7 | | | | | | | |
| | 12.5 cm | 2400 | 56,2 | 31,9 | 17,7 | 9,6 | 4,9 | | | | | | | | |
| | 10 cm | 3000 | 52,4 | 27,6 | 14,2 | 6,9 | 3,0 | | | | | | | | |
| | 7.5 cm | 4000 | 46,4 | 21,4 | 9,0 | | | | | | | | | | |
| | 6 cm | 5000 | 39,1 | 14,3 | 3,0 | | | | | | | | | | |
| | 5 cm | 6000 | 31,9 | 7,5 | | | | | | | | | | | |

M&P-AIRBORNE 5 /.200" Power Handling/Temperature (in Continuous Carrier)

| | | Temperature C° / F° | | | | | | | | | | |
|-------------|----------|---------------------|---------|--------|---------|---------|---------|----------|----------|----------|----------|-----|
| Wave length | MHz | -10 / 14 | -5 / 23 | 0 / 32 | 10 / 50 | 20 / 68 | 30 / 86 | 40 / 104 | 50 / 122 | 60 / 140 | 70 / 158 | |
| Frequencies | 166.66 m | 1,8 | 1600 | 1600 | 1600 | 1594 | 1467 | 1317 | 1172 | 1000 | 827 | 656 |
| | 85.71 m | 3,5 | 1296 | 1252 | 1215 | 1138 | 1048 | 941 | 837 | 714 | 591 | 469 |
| | 42.85 m | 7 | 968 | 935 | 908 | 850 | 783 | 703 | 625 | 533 | 441 | 350 |
| | 30 m | 10 | 841 | 813 | 789 | 739 | 680 | 611 | 543 | 464 | 384 | 304 |
| | 21.42 m | 14 | 729 | 705 | 684 | 641 | 590 | 530 | 471 | 402 | 333 | 264 |
| | 14.28 m | 21 | 610 | 589 | 572 | 536 | 493 | 443 | 394 | 336 | 278 | 221 |
| | 10.71 m | 28 | 536 | 518 | 502 | 470 | 433 | 389 | 346 | 295 | 244 | 194 |
| | 6 m | 50 | 415 | 401 | 389 | 364 | 335 | 301 | 268 | 228 | 189 | 150 |
| | 3 m | 100 | 307 | 297 | 288 | 270 | 248 | 223 | 198 | 169 | 140 | 111 |
| | 2.08 m | 144 | 264 | 255 | 248 | 232 | 213 | 192 | 170 | 145 | 120 | 95 |
| | 1.5 m | 200 | 226 | 218 | 212 | 198 | 183 | 164 | 146 | 124 | 103 | 82 |
| | 75 cm | 400 | 158 | 153 | 148 | 139 | 128 | 115 | 102 | 87 | 72 | 57 |
| | 69 cm | 430 | 153 | 148 | 143 | 134 | 123 | 111 | 99 | 84 | 70 | 55 |
| | 37.5 cm | 800 | 109 | 106 | 102 | 96 | 88 | 79 | 71 | 60 | 50 | 40 |
| | 30 cm | 1000 | 97 | 94 | 91 | 85 | 79 | 71 | 63 | 54 | 44 | 35 |
| | 23.1 cm | 1296 | 85 | 82 | 80 | 75 | 69 | 62 | 55 | 47 | 39 | 31 |
| | 12.5 cm | 2400 | 61 | 59 | 57 | 54 | 49 | 44 | 39 | 34 | 28 | 22 |
| 10 cm | 3000 | 54 | 52 | 51 | 48 | 44 | 39 | 35 | 30 | 25 | 20 | |
| 7.5 cm | 4000 | 48 | 46 | 45 | 42 | 38 | 35 | 31 | 26 | 22 | 17 | |
| 6 cm | 5000 | 42 | 41 | 40 | 37 | 34 | 31 | 27 | 23 | 19 | 15 | |
| 5 cm | 6000 | 38 | 37 | 36 | 34 | 31 | 28 | 25 | 21 | 18 | 14 | |

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