

1GHz HI-Q DIGITAL SPLITTERS Vertical Series



MARATHON Passives have been engineered and manufactured to provide the highest performance and reliability. They ensure the best quality signal distribution possible for current HDTV, DOCSIS Data, Digital Voice and future interactive Broadband Networks. The Marathon engineering team has a proven 30 year track record in the Broadband Cable industry and offers the best class in mechanical and consistent RF performance with high quality components and strict QC metrics.

They are available in a full line of housing configurations for headend, commercial or subscriber applications. *Your subscribers demand the best ... Install Marathon Drop Passives.*

Features & Benefits

- Consistent, high RF performance from 5 – 1002 MHz through extreme temperatures
- Enhanced 15 – 42 MHz return path for superior output return loss and port to port isolation performance
- 6 kV ring wave surge protection on all ports
- Ultra linear ferrites prevent inter-modulation where high level return carriers can affect forward path performance
- E180 series Enhanced 180° contacts engineered for maximum conductor contact and superior retention; design allows insertion without marring the center conductor
- High grade voltage blocking capacitors on all ports to eliminate core saturation and prevent hum modulation
- Solid Zinc cast housing with Bright Tin triple plating for durability in harsh environments
- Universal drive Mounting and Ground Port screws packaged with each splitter
- Sealed ports to prevent moisture ingress to 15 PSI
- Meets or exceeds ANSI/SCTE 153 2008 for outdoor use
- MoCA compliant

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VERTICAL SERIES SPECIFICATIONS

Parameter	Frequency	MARS1002V		MARS1003V		MARS1003BV		MARS1004V		MARS1006V		MARS1008V	
	(MHz)	Typ	QA	Typ	QA	Typ	QA	Typ	QA	Typ	QA	Typ	QA
Insertion Loss Maximum (dB)	5 - 15	3.3	3.5	3.3 / 6.8	3.5 / 7.0	5.5	6.0	6.8	7.0	9.0	9.2	10.8	11.0
	15 - 42	3.3	3.5	3.4 / 6.8	3.5 / 7.0	5.5	5.8	6.8	7.2	9.0	9.2	10.8	11.0
	50 - 550	3.5	3.8	3.6 / 7.2	3.4 / 7.2	5.8	6.0	7.2	7.6	9.4	9.6	11.0	11.2
	550 - 870	3.6	3.8	3.8 / 7.5	4.0 / 7.6	5.9	6.2	7.3	7.6	9.7	9.9	11.4	11.8
	870 - 1002	3.8	4.2	4.0 / 8.0	4.3 / 8.3	6.5	6.9	7.8	8.2	10.0	10.5	12.0	12.5
Return Loss Input Minimum (dB)	5 - 15	22	20	22	20	22	20	22	20	22	20	20	22
	15 - 42	25	22	25	22	25	22	25	22	25	22	22	25
	50 - 550	22	20	22	20	22	20	22	20	22	20	22	20
	550 - 870	22	20	22	20	22	20	22	20	22	20	22	20
	870 - 1002	22	20	22	20	22	20	22	20	22	20	22	20
Return Loss Output Minimum (dB)	5 - 15	22	20	22	20	22	20	22	20	22	20	22	20
	15 - 42	38	30	38	30	35	25	38	30	30	25	35	28
	50 - 550	25	20	25	20	22	20	25	20	22	20	25	20
	550 - 870	22	20	22	20	22	20	22	20	22	20	22	20
	870 - 1002	22	20	22	20	22	20	22	20	22	20	22	20
Port/Port Isolation (Output/Output) Minimum (dB)	5 - 15	25	22	30	22	25	22	25	22	25	22	25	22
	15 - 42	40	35	40	35	38	32	40	35	28	35	40	32
	50 - 550	28	25	28	25	28	25	28	25	28	25	28	25
	550 - 870	27	24	27	24	27	24	27	24	27	24	27	24
	870 - 1002	25	23	25	23	25	23	25	23	25	23	25	23
RFI (dB)	5 - 1002	-130	-120	-130	-120	-130	-120	-130	-120	-130	-120	-130	-120
Impedance	5 - 1002	75 Ohm											
Spurious Signals Including 2nd Harmonics	-45 dBmV after 6 kV ring wave surge. Measuring with a 55 dBmV return input carrier.												
Surge Protection	6 kV Ring Wave per IEEE C62.41-1991 Category A3												
Waterproof test (Min)	15 PSI												
Operating Temperature	-40°C to +60°C												
Corrosion Resistance	1000 hours of salt spray as per ANSI/SCTE 143 2007												