



Morel Ultimo Titanium Specifications

General data		ULTIMO TITANIUM 8		ULTIMO TITANIUM 10		ULTIMO TITANIUM 12	
		2 ohm	4 ohm	2 ohm	4 ohm	2 ohm	4 ohm
Overall Dimensions	DxH	Q 222mm (8.74") X 120 mm (4.72")	Q 263mm (10.35") X 140.3 mm (5.52")	Q 305mm (12") X 146.9 mm (5.78")			
Power Handling RMS	P	800 W		1000 W		1000 W	
Transient power 10ms		3000 W		3000 W		3000 W	
Sensitivity 2.83Vrms/1M		84 dB	83.7dB	86.1dB	85dB	87 dB	86.3dB
Sensitivity 1W/1M		83.5 dB		84.5 dB		85 dB	
Frequency Response		20-900 Hz		10-900 Hz		10-900 Hz	
Cone Material		Carbon-fiber laminated paper		Carbon-fiber laminated paper		Carbon-fiber laminated paper	
Net Weight		6.1 Kg. (13.44 lb)		6.5 Kg. (14.3 lb)		6.7 Kg. (15 lb)	
Driver displacement		2.0 Lit (0.07 cu.ft)		2.34 Lit (0.08 cu.ft)		2.6 Lit (0.09 cu.ft)	
Voice Coil and Magnet Parameters -with 5 inch copper sleeve							
Voice Coil Diameter		130 mm (5.1")		130 mm (5.1")		130 mm (5.1")	
Voice Coil Height		37mm (1.45")		37mm (1.45")		37mm (1.45")	
Voice Coil Former		Titanium		Titanium		Titanium	
Voice coil wire		Hexatech Aluminum		Hexatech Aluminum		Hexatech Aluminum	
Number of layers		2		2		2	
Max. Linear excursion	X	±12.5 mm (0.5") (Each way)		± 12.5 mm (0.5") (Each way)		±12.5 mm (0.5") (Each way)	
Magnet system type		Double magnet vented		Double magnet vented		Double magnet vented	
HE-Magnetic gap height	HE	12mm (0.5")		12mm (0.5")		12mm (0.5")	
B flux density	B	0.64 T		0.64 T		0.64 T	
BL product	BXL	13.0 T·M		13.0 T·M		13.0 T·M	
Electrical Data							
Nominal Impedance	Z	2.0 ohm	4.0 ohm	2.0 ohm	4.0 ohm	2.0 ohm	4.0 ohm
DC Resistance	RE	1.7 ohm	3.7 ohm	1.7 ohm	3.7 ohm	1.7 ohm	3.7 ohm
Voice Coil Inductance @ 1KHz	LBM	0.14mH	0.44mH	0.14mH	0.44mH	0.14mH	0.44mH
T-S Parameters							
Suspension Compliance	CMS	0.19 ^{mm} _N	0.17 ^{mm} _N	0.36 ^{mm} _N	0.46 ^{mm} _N	0.37 ^{mm} _N	0.33 ^{mm} _N
Mechanical Q Factor	QMS	3.88	4.31	4.34	4.37	5.09	6.53
Electrical Q Factor	QES	0.73	0.61	0.58	0.41	0.61	0.50
Total Q Factor	QTS	0.62	0.53	0.51	0.37	0.54	0.46
Mechanical Resistance	RMS	5.49 ^{Ns} _M	5.26 ^{Ns} _M	4.26 ^{Ns} _M	3.37 ^{Ns} _M	3.42 ^{Ns} _M	2.94 ^{Ns} _M
Moving Mass	MMS	107g		127g		134g	
Resonant Frequency	FS	39 Hz		24 Hz		24 Hz	
Eq. Cas Air Load (liters)	VAS	17 Lit (0.6 cu.ft)	16 Lit (0.56cu.ft)	66 Lit (2.33cu.ft)	85 Lit (3.02cu.ft)	117 Lit (4.12cu.ft)	103 Lit (3.63cu.ft)
Effective Piston Area	SD	0.0254 m ²		0.0363 m ²		0.0471 m ²	