

**Impedance/Conductance Reference Values
C&D VRLA Monobloc Batteries**

Per IEEE 1188-2005, Internal ohmic values are useful as a trending tool. To use these readings effectively, accurate baseline readings should be taken after about six months of battery operation. Internal ohmic readings taken without the benefit of baseline data may be difficult to interpret and of limited value. Values are provided are for reference only and are highly dependent on many variables including but not limited to temperature, float voltage and specific manufacturer probes and meters used.

	HP	Midtronics	Alber	AVO Biddle
Model Number	Impedance milli-Ohms @ 60Hz	Mhos	micro-Ohms	milli-Ohms

UPS HIGH RATE				
UPS12-100FR	7.17	603	10572	8.52
UPS12-140FR	4.03	1007	6412	4.86
UPS12-170FR	4.59	949	7006	5.49
UPS12-200FR	3.81	1138	5900	4.44
UPS12-270FR	2.64	1669	4261	3.06
UPS12-310FR	2.38	1914	3854	2.76
UPS12-370FR	2.15	2079	3517	2.44
UPS12-475FR	2.64	1844	3952	2.92
UPS12-530FR	2.21	2032	3561	2.51
UPS6-620MR	ltd data	ltd data	ltd data	ltd data

UPS HIGH RATE MAX				
UPS12-100MR	7.17	603	10572	8.52
UPS12-150MR	4.03	1007	6412	4.86
UPS12-210MR	3.81	1138	5900	4.44
UPS12-300MR	2.64	1669	4261	3.06
UPS12-350MR	2.38	1914	3854	2.76
UPS12-400MR	2.15	2079	3517	2.44
UPS12-490MR	2.64	1844	3952	2.92
UPS12-540MR	2.21	2032	3561	2.51
UPS12-700MRF	2.59	1836	3480	2.45
UPS6-620MR	ltd data	ltd data	ltd data	ltd data

TELECOM SERIES				
TEL12-30	5.30	752	8304	6.64
TEL12-45	4.74	858	7243	5.75
TEL12-70	3.35	1326	5567	3.95
TEL12-80	3.02	1467	4707	3.50
TEL12-90	2.77	1546	4664	3.39
TEL12-125	2.69	1747	4252	3.07
TEL12-105F/FS	3.10	1300	4450	3.33
TEL12-105FNS/FNSG	ltd data	1050	ltd data	ltd data
TEL12-115FN/FNG	ltd data	1090	ltd data	ltd data
TEL12-155F/FG	ltd data	1120	ltd data	ltd data
TEL12-160FW	ltd data	1780	3340	2.68
TEL12-160F	ltd data	1500	3940	3.14
TEL12-170F/FG	ltd data	1400	ltd data	ltd data
TEL12-180F	ltd data	1510	4260	3.66
TEL12-190F/FG	ltd data	1450	ltd data	ltd data
TEL12-210F/FG	ltd data	1500	ltd data	ltd data
TEL6-180	ltd data	ltd data	ltd data	ltd data

DEEP CYCLE SERIES				
DCS-33	5.30	784	7971	6.50
DCS-50	4.75	916	7237	5.93
DCS-75	3.32	1328	4882	4.06
DCS-88	2.88	1592	4316	3.25
DCS-100	3.01	1515	4520	3.49

BROADBAND SERIES				
BBG85GXL	7.47	629	11418	8.05
BBG165G	4.34	1093	6216	4.93
BBG180GXL	4.74	1029	6636	5.29
BBG210GXL	4.17	1174	6067	4.69

MULTI PURPOSE SERIES				
MPS12-33	4.78	876	7652	5.81
MPS12-50	4.59	949	7006	5.49
MPS12-75	3.11	1399	4875	3.60
MPS12-88	2.66	1691	4380	3.11
MPS12-100	2.64	1636	4580	3.20

ltd data = more unit data needed