Century Style Analog Panel Meters

- **UL Recognized – File # E91015**
  Except for the Wattmeters and Frequency Meters
- **Glass window for optimum viewing**
- **Rugged black plastic case**
- **Black knife-edge pointer for precision reading**

The Specifications & Dimensions are on the last pages

Ordering Information

AC Milliammeters, Iron-Vane Movement				
Range	Appprox. Impedance (Ohms) @ 60 Hz	Model / Size and Catalog Number		
		2-1/2" Model 2152	3-1/2" Model 2153	4-1/2" Model 2154
0-10	1,650	17680	<>	17760
0-50	80	17681	17716	17761
0-100	17.2	17682	17717	17762
0-250	3.15	17683	17718	17763
0-500	0.9	17684	17719	17764

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Ordering Information

AC Ammeters, Iron-Vane Movement				
Range	Appprox. Impedance (Ohms) @ 60 Hz	Model / Size and Catalog Number		
		2-1/2" Model 2152	3-1/2" Model 2153	4-1/2" Model 2154
0-1	.213	17665	17695	17740
0-1.5	.105	17666	<>	<>
0-2	.065	<>	17697	17742
0-3	.028	17667	17698	17743
0-5	.008	17668	17699	17744
0-10	.004	17669	17700	17745
0-10	.008	<>	35081 †	35085 †
0-15	.0025	17670	17701	17746
0-25	.002	17671	17702	17747
0-25	.008	<>	35082 †	35086 †
0-30	.0015	17672	17703	17748
0-50	.001	17673	17704	17749
0-50	.008	<>	35083 †	35087 †
0-75	.0002	<>	17710	17755
0-75	.008	<>	35084 †	35088 †
0-80	.008	<>	35036 †	<>
0-100	.008	17674 †	17706 †	17751 †
0-150	.008	<>	17707 †	17752 †
0-200	.008	<>	17708 †	17753 †
0-300	.008	<>	17709 †	17754 †

† These meters are 5-amp meters to be used with an external current transformer

<> Available on special order

AC Dual Range Ammeter / Voltmeter, Iron-Vane Movement				
Range	Appprox. Impedance (Ohms) @ 60 Hz	Model / Size and Catalog Number		
		2-1/2" Model 2152	3-1/2" Model 2153	4-1/2" Model 2154
0-150V 0-5A	15,030 0.021	-	17694	17739

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Ordering Information

AC Voltmeters, Iron-Vane Movement				
Range	Appprox. Impedance (Ohms) @ 60 Hz	Model / Size and Catalog Number		
		2-1/2" Model 2152	3-1/2" Model 2153	4-1/2" Model 2154
0-5	33	<>	17725	<>
0-10	133	17685	17726	17771
0-15	300	17686	17727	17772
0-25	833	17687	17728	17773
0-50	3,333	17688	17729	17774
0-100	16,666	<>	17730	17775
0-150	25,000	17690	17731	17776
0-250	41,166	17691	17732	17777
0-300	50,000	17692	17733	17778
0-500 †	83,333	<>	17734 †	17779 †

† External multipliers, Model 183 are furnished on AC meters having a range of 500 volts or higher. All others have self-contained multipliers

<> Available on special order

AC Voltage Meters Rectifier Type, Self-shielding Movement				
Range	Appprox. Impedance (Ohms)@ 60 Hz	Model / Size and Catalog Number		
		2-1/2" Model 2142	3-1/2" Model 2143	4-1/2" Model 2144
0-5	2000 Ohms Per Volt	17460	17542	17640
0-10		<>	17543	17641
0-15		<>	17544	17642
0-50		<>	17545	17643
0-150		17462	17546	17644
0-300		<>	<>	17645

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Ordering Information

DC Milliammeters, Self-shielding Movement					
Range	Appprox. Impedance (Ohms) @ 60 Hz	Model / Size and Catalog Number			
		1-1/2" Model 2121	2-1/2" Model 2122	3-1/2" Model 2123	4-1/2" Model 2124
0-1	43.0	17825	17430	17510	17600
0-3	2.0	<>	17431	17511	17601
0-5	2.0 (20) †	17826	17432	17512	17602
0-10	10.0 (2.2) †	17827	17433	17513	17603
0-15	6.6 (2.2) †	17828	17434	<>	<>
0-20	5.0	<>	<>	17515	<>
0-25	4.0 (6.0) †	17829	17436	17516	17606
0-50	2.0 (3.0) †	17830	17437	17517	17607
0-100	1.0 (1.5) †	17832	17438	17518	17608
0-150	.66 (1.0) †	17833	17439	17519	17609
0-200	.50 (.75) †	17834	17440	17520	17610
0-250	.40 (.60) †	17835	17441	17521	17611
0-300	.33 (.50) †	17836	17442	17522	17612
0-500	.20 (.30) †	17837	17443	17523	17613
0-750	.13	<>	<>	17524	17614
0-1000	.05	<>	17444	<>	17615

† Resistances of Model 2121 shown in ( )

<> Available on special order

DC Microammeters, Self-shielding Movement					
Range	Appprox. Impedance (Ohms) @ 60 Hz	Model / Size and Catalog Number			
		1-1/2" Model 2121	2-1/2" Model 2122	3-1/2" Model 2123	4-1/2" Model 2124
0-50	1800 (5500) †	17815	17418	17499	17589
0-100	1800	17816	17420	17501	17591
0-200	1100	17818	17422	17503	17593
0-500	90 (190) †	17819	17424	17505	17595
25-0-25	1800 (5500) †	17820	<>	17506	17596
50-0-50	1800	17821	17425	17507	17597
100-0-100	1100	17822	17426	17508	17598
500-0-500	43	17823	35063	17509	17599

† Resistances of Model 2121 shown in ( )

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Ordering Information

Taut Band DC Microammeters, Self-shielding Movement				
Range	Appprox. Impedance (Ohms) @ 60 Hz	Model / Size and Catalog Number		
		2-1/2" Model 2122T	3-1/2" Model 2123T	4-1/2" Model 2124T
0-10	4900	17415	17496	17586
0-15	1960	17416	17497	17587
0-25	1960	17417	17498	17588
0-50	960	17419	17500	17590
0-100	500	17421	17502	17592
0-200	234	17423	<>	17594

<> Available on special order

DC Ammeters, Self-shielding Movement					
Range	Appprox. Impedance (Ohms) @ 60 Hz	Model / Size and Catalog Number			
		1-1/2" Model 2121	2-1/2" Model 2122	3-1/2" Model 2123	4-1/2" Model 2124
0-1	.050	17800	17400	17475	17565
0-1.5	.003	<>	17401	17476	<>
0-2	.025	17801	17402	17477	17567
0-3	.0166	17802	17403	17478	17568
0-5	.010	17803	17404	17479	17569
0-10	.005	17805	17405	17480	17570
0-15	.0033	17806 †	17406	17481	17571
0-25	.0020	17807 †	17407	17482	17572
0-30	.0017	<>	17408	17483	17573
0-50	.001	17808 †	17409	17484	17574
0-100	10.0	<>	17410 †	17485 †	17575 †
0-150	10.0	<>	<>	17486 †	17576 †
0-200	10.0	<>	17412 †	17487 †	17577 †
0-300	10.0	<>	-	17488 †	17578 †
0-500	10.0	<>	-	17489 †	17579 †
2-0-2	.025	<>	-	35064	-
5-0-5	.010	<>	-	35072	-
15-0-15	.0033	<>	-	17490	-
30-0-30	.0017	<>	-	17491	-

† 1-1/2" DC current meters are self-contained through 10 amps; higher ranges are supplied as 50mV meters and require an external shunt;

† 2-1/2", 3-1/2" and 4-1/2" meters are self-contained through 50 amps; higher ranges are 50mV and require use of an external shunt

<> Available on special order

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Ordering Information

Wattmeters / Dynamometer Type, Not UL				
Range	Maximum		Model / Size and Catalog Number	
	Volts	Amps	3-1/2" Model 2173	4-1/2" Model 2174
0-10	150	.175	17875 *	17890 *
0-20	150	.400	17876	17891 *
0-30	150	0.650	17877 *	17892 *
0-30	300	0.300	18879 *	17894 *
0-50	300	0.500	17880 *	17895 *
0-75	150	1.0	17881	17896
0-150	150	2.0	17882	17897
0-300	150	4.0	17883	17898
0-600	300	4.0	17884	17899
0-750	150	10.0	17885	17900
0-1500	300	10.0	17886	17901
0-3000	300	20.0	17887	17902

* Compensated wattmeters: calibrated for either magnetic or non-magnetic panels and for a frequency of 25-125Hz

Percent Moter Load Meters, Self-shielding Movement					
Type	Maximum		Model / Size and Catalog Number		
	Rating	3-1/2" Model No.	Catalog No.	4-1/2" Model No.	Catalog No.
DC (Note 1)	30 mV	2123	17564	2124	17637
AC (Note 2)	5 amps	2153	17711	2154	17756

1. These DC meters require an external shunt and an 8 to 10Ω 2W wire-wound potentiometer (customer supplied)

2. These AC meters require use of a current transformer

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Ordering Information

Frequency Meters, Self-shielding Movement, Not UL				
Range	Approx. Impedance (Ohms) @ 60 Hz	Model / Size and Catalog Number		
		2-1/2" Model 2182	3-1/2" Model 2183	4-1/2" Model 2184
45-55 Hz	120V	35118	35124	35130
55-65 Hz	120V	35120	35126	35132
380-420 Hz	120V	35122	35128	35134
45-55 Hz	240V	35119	35125	35131
55-65 Hz	240V	35121	35127	35133
380-420 Hz	240V	35123	35129	35135

DC Millivoltmeters, Self-shielding Movement				
Range	Approx. Impedance (Ohms) @ 60 Hz	Model / Size and Catalog Number		
		2-1/2" Model 2122	3-1/2" Model 2123	4-1/2" Model 2124
0-50	10.0	17472	17540	17636
50-0-50	20.0	<>	17541	17635
<> Available on special order				

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Century Style Analog Panel Meters

Ordering Information

DC Voltage Meters, Self-shielding Movement					
Range	Approx. Impedance (Ohms) @60 Hz		Model / Size and Catalog Number		
		1-1/2" Model 2121	2-1/2" Model 2122	3-1/2" Model 2123	4-1/2" Model 2124
0-5		17840	17445	17525	17618
0-8		<>	<>	<>	17619
0-10		17842	17446	17527	17620
0-15		17843	17447	17528	17621
0-25		17844	17448	17529	17622
0-30		17845	17449	17530	17623
0-50	1000 Ohms Per Volt	17846	17450	17531	17624
0-100		17848	17451	17532	17625
0-150		17849	17452	17533	17626
0-200		<>	<>	17534	17627
0-250		<>	<>	17535	<>
0-300		-	17455	17536	17629
0-300		17850	<>	<>	<>
0-500	2000 Ohms Per Volt	17851 †	17456	17537	17630
0-750		<>	<>	17538	17631
0-1000		<>	17458 †	17539 †	17632 †

† External mulipliers (Model 183) are furnished on 1-1/2" DC meters 500 volts or higher;
on 2-1/2" DC meters 750 volts or higher;
and on 3-1/2" and 4-1/2" DC meters 1,000 volts or higher.
All others have self-contained multipliers

<> Available on special order

4-20 DCmA Process Meters			
Size	Scale	Model	Catalog Number
3-1/2"	0-100%	2123	35027
4-1/2"	0-100%	2124	35028

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Century Style Analog Panel Meters

Frequency Meter Specifications	
Accuracy	45-55Hz ± 0.3Hz (120V-240V)
	55-65Hz ± 0.3Hz (120V-240V
	380-420Hz ± 1.2Hz (120V-240V)
Movement	Small core magnet, self-shielding
Suspension	Pivot and jewel
Tracking	±3%
Shielding	Calibration is unaffected by magnetic panel mounting
Center Scale Value	50/60/400Hz
Power Consumption	1.6VA
Max. Input Voltage (10 sec)	150, 120V normal; 280, 240V normal
Dial	Each dial arc is calibrated to track the specific type of movement used
Operating Temperature	-4ºF to +149ºF (-20ºC to +65ºC)
Case	High density black plastic
Pointer	Knife-edge, with black matte finish
Scale Length	Model 2182: 1.88" (47.2mm)
	Model 2183: 2.48" (63.0mm)
	Model 2184: 3.68" (93.5mm)
Net Weight	Model 2182: 5oz (0.14kg)
	Model 2183: 6oz (0.17kg)
	Model 2184: 9oz (0.26kg)
Warm-up Time	5 minutes

Watt Meter Specifications	
Accuracy	±2% F.S.; Compensated Meters: ±3% F.S.
Movement	Dynamometer
Suspension	Pivot and jewel
Tracking	±3%
Shielding	Calibration is unaffected by magnetic panel mounting
Response Time	1.5 seconds maximum
Overload (1 sec.)	10 times F.S.
Overload (Continuous)	1.5 times F.S.
Repeatability	2%
Dial	Each dial arc is calibrated to track the specific type of movement used
Resistance	±15% of meter impedance
Operating Temperature	-4ºF to +149ºF (-20ºC to +65ºC)
Case	High density black plastic
Pointer	Knife-edge, with black matte finish
Scale Length	Model 2173: 2.48" (63.0mm)
	Model 2174: 3.68" (93.5mm)
Net Weight	Model 2173: 9oz (0.26kg)
	Model 2174: 13oz (0.37kg)

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Century Style Analog Panel Meters

Specifications for Other Meters	
Accuracy	±2% F.S. Iron Vane, ±3% F.S. Rectified
Movement	Models 2152, 2153, 2154: Iron-vane, magnetically damped. 2121 and 2121T: small core magnet, all others Annular, self-shielding
Suspension	Pivot and jewel except for "T" models which have taut band movement
Tracking	±3%
Shielding	Calibration is unaffected by magnetic panel mounting
Response Time	1.5 seconds maximum
Overload (1 sec.)	10 times F.S.
Overload (Continuous)	1.5 times F.S.
Repeatability	2% pivot and jewel, 0.5% taut band
Dial	Each dial arc is calibrated to track the specific type of movement used
Resistance	±15% of meter impedance
Operating Temperature	-4ºF to +149ºF (-20ºC to +65ºC)
Case	High density black plastic
Pointer	Knife-edge, with black matte finish
Scale Length	Model 2121 & 2121T: 1.25" (31.7mm)
	Model 2152: 1.86" (47.2mm)
	Model 2122, 2122T, 2142: 2.07" (52.7mm)
	Model 2153: 2.48" (63.0mm)
	Model 2123, 2123T, 2143: 2.75" (69.8mm)
	Model 2154: 3.68" (93.5mm)
	Model 2124, 2124T, 2144: 4.09" (103.9mm)
Net Weight	Model 2121 & 2121T: 2oz (0.06kg)
	Model 2152: 5oz (0.14kg)
	Model 2153: 6oz (0.17kg)
	Model 2122, 2122T, 2142: 7oz (0.20kg)
	Model 2123, 2123T, 2143: 8oz (0.23kg)
	Model 2154: 9oz (0.26kg)
	Model 2124, 2124T, 2144: 11oz (0.31kg)

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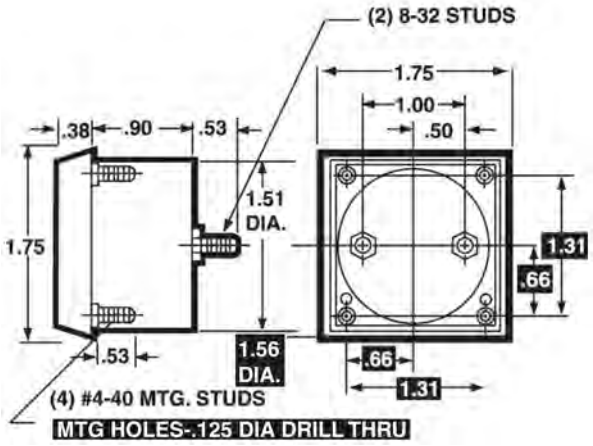
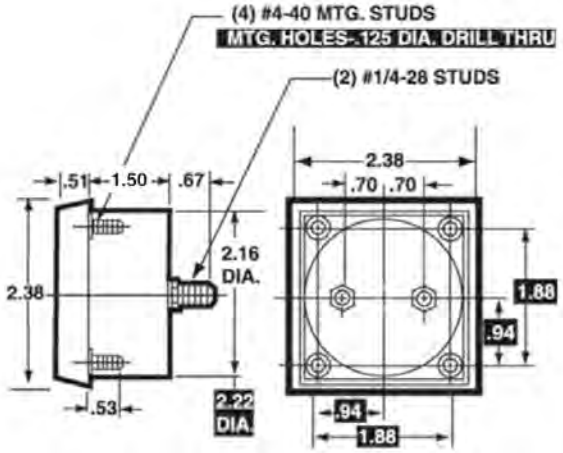
Century Style Analog Panel Meters

Dimensions

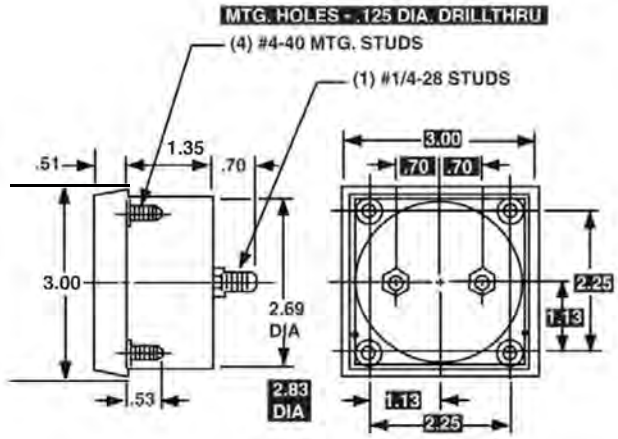
1-1/2" Models 2121, 2121T



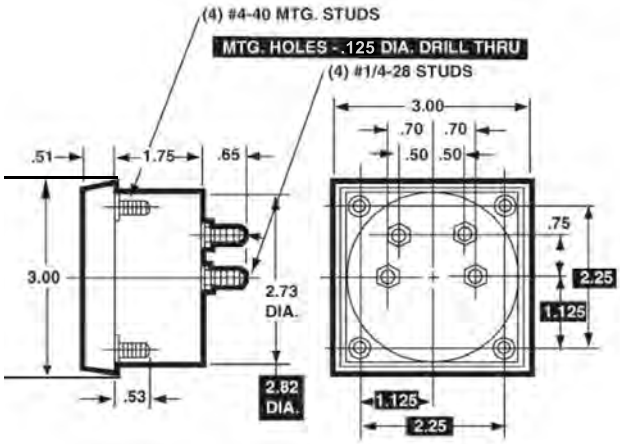
2-1/2" Models 2122, 2122T, 2142, 2152, 2182



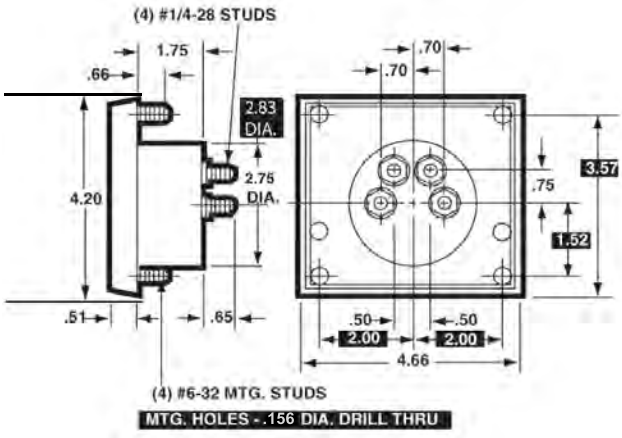
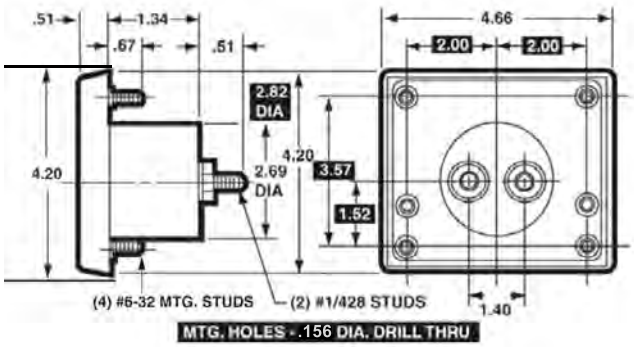
3-1/2" Models 2123, 2123T, 2143, 2153, 2183



3-1/2" Model 2173



4-1/2" Model 2174



4-1/2" Models 2124, 2124T, 2144, 2154, 2184