





# Comparing the Digital Multimeter Family to the 283 FC DMM



	283 FC	175	177	179	1587 FC	27 II	28 II
<b>Basic features</b>							
Counts	6000	6000	6000	6000	6000	6000	20000
True-RMS	Yes	Yes	Yes	Yes	Yes	No	Yes
Basic DC accuracy	0.09 %	0.15 %	0.09 %	0.09 %	0.09 %	0.1 %	0.05 %
AC bandwidth	1 kHz	1 kHz	1 kHz	1 kHz	5 kHz	30 kHz	20 kHz
Auto / Manual ranging	• / •	• / •	• / •	• / •	• / •	• / •	• / •
<b>Measurements</b>							
Voltage AC/DC	1000 V / 1500 V	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V
Current AC/DC	60 A w/ a283 FC	10 A	10 A	10 A	400 mA	10 A	10 A
Resistance	50 MΩ	50 MΩ	50 MΩ	50 MΩ	50 MΩ	50 MΩ	50 MΩ
Frequency	99 kHz	100 kHz	100 kHz	100 kHz	100 kHz	200 kHz	200 kHz
Capacitance	9999 μF	9999 μF	9999 μF	9999 μF	9999 μF	9999 μF	9999 μF
Temperature	-	-	-	400° C (752° F)	537° C (998° F)	-	+1090° C (+1994° F)
dB	-	-	-	-	-	-	-
Conductance	-	-	-	-	-	60 nS	60 nS
Duty cycle / Pulse width	-	-	-	-	-	• / -	• / -
Continuity/Diode test	• / -	• / •	• / •	• / •	• / •	• / •	• / •
Meter Readiness Self-check	•	-	-	-	-	-	-
Limit Gauge	•	-	-	-	-	-	-
<b>Display and Keypad</b>							
Backlight	•	-	•	•	•	•	•
Illuminated keypad	•	-	-	-	-	•	•
<b>Diagnostics and data</b>							
Min/Max recording / with time stamp	• / •	• / -	• / -	• / -	• / -	• / -	• / -
Display hold/Auto (Touch) hold	• / •	• / •	• / •	• / •	• / •	• / •	• / •
Stand alone logging	Yes	-	-	-	-	-	-
Trend capture	with App	-	-	-	-	-	-
<b>Other features</b>							
Real time clock	•	-	-	-	-	-	-
Separate battery/fuse access	• / no fuse required	• / •	• / •	• / •	• / •	• / •	• / •
Operating temperature range	-10° to 60° C (14° to 140° F)	-10° to 50° C (14° to 122° F)	-10° to 50° C (14° to 122° F)	-10° to 50° C (14° to 122° F)	-20° to 55° C (-4° to 131° F)	-40° to 55° C (-40° to 131° F)	-40° to 55° C (-40° to 131° F)
<b>Warranty and electrical safety</b>							
Limited lifetime warranty	•	•	•	•	3 year	•	•
IP rating	IP52	-	-	-	IP40	IP67	IP67
Safety rating (IEC61010) CATIII	1500 V	1000 V	1000 V	1000 V	1000 V	1000 V	1000 V
Safety rating (IEC61010) CATIV	1000 V	600 V	600 V	600 V	600 V	600 V	600 V