

XCP Meter #	Meter Name	Description	Units	Developer Notes
1	OUTPUT VOLTS AB	RMS Voltage measured at the Output of the UPS (i.e. that applied to the load), measured phase A to B.	V rms	
2	OUTPUT VOLTS BC	RMS Voltage measured at the Output of the UPS (i.e. that applied to the load), measured phase B to C.	V rms	
3	OUTPUT VOLTS CA	RMS Voltage measured at the Output of the UPS (i.e. that applied to the load), measured phase C to A.	V rms	
4	INPUT VOLTS AB	RMS Voltage measured at the Utility Input of the UPS, measured phase A to B.	V rms	
5	INPUT VOLTS BC	RMS Voltage measured at the Utility Input of the UPS, measured phase B to C.	V rms	
6	INPUT VOLTS CA	RMS Voltage measured at the Utility Input of the UPS, measured phase C to A.	V rms	
7	INVERTER VOLTS AB	RMS Voltage measured at the Output of the Inverter, measured phase A to B.	V rms	
8	INVERTER VOLTS BC	RMS Voltage measured at the Output of the Inverter, measured phase B to C.	V rms	
9	INVERTER VOLTS CA	RMS Voltage measured at the Output of the Inverter, measured phase C to A.	V rms	
10	BYPASS VOLTS AB	RMS Voltage measured at the input of the Bypass feed, if the UPS has a separate Bypass feed, measured phase A to B.	V rms	
11	BYPASS VOLTS BC	RMS Voltage measured at the input of the Bypass feed, if the UPS has a separate Bypass feed, measured phase B to C.	V rms	
12	BYPASS VOLTS CA	RMS Voltage measured at the input of the Bypass feed, if the UPS has a separate Bypass feed, measured phase C to A.	V rms	
13	MAIN LOGIC POWER	Measure of the power supply for the UPS's logic, normally the unregulated supply, measured in DC Volts. Service Measure.	V dc	
14	SECONDARY V+ POWER	Measure of an internal supply for UPS control or analog circuits, measured in + DC Volts. Service Measure	V dc	
15	SECONDARY V- POWER	Measure of an internal supply for UPS control or analog circuits, measured in - DC Volts. Service Measure	V dc	
16	INVERTER AVG CURRENT PHASE A	A measure of the current output from the Inverter phase A, but not an rms measure. Service Measure		
17	INVERTER AVG CURRENT PHASE B	A measure of the current output from the Inverter phase A, but not an rms measure. Service Measure		
18	INVERTER AVG CURRENT PHASE C	A measure of the current output from the Inverter phase A, but not an rms measure. Service Measure		
19	INPUT CURRENT PHASE A	A measure of the Input phase A current for the UPS, in RMS Amps.	Amps rms	
20	INPUT CURRENT PHASE B	A measure of the Input phase B current for the UPS, in RMS Amps.	Amps rms	
21	INPUT CURRENT PHASE C	A measure of the Input phase C current for the UPS, in RMS Amps.	Amps rms	
22	OUTPUT WATTS	Total Output true power measurement (Units: Watts)	Watts	
23	INPUT WATTS	Total Input true power measurement (Units: Watts)	Watts	
24	OUTPUT VA	Total Output VA measurement (Units: VA)	VA	
25	INPUT VA	Total Input VA measurement (Units: VA)	VA	
26	OUTPUT POWER FACTOR	Output Power Factor. (Dimensionless value, 0.00 to 1.00; values outside this range mean "unknown")		
27	INPUT POWER FACTOR	Input Power Factor. (Dimensionless value, 0.00 to 1.00; values outside this range mean "unknown")		
28	OUTPUT FREQUENCY	Output Frequency measurement (Hz)	Hz	
29	INPUT FREQUENCY	Input Frequency measurement (Hz)	Hz	
30	INVERTER FREQUENCY	Inverter output Frequency measurement (Hz)	Hz	
31	BYPASS FREQUENCY	Bypass Frequency measurement (Hz)	Hz	
32	DC LINK VOLTS	DC voltage rectifier to inverter. Service Measure	V dc	
33	BATTERY CURRENT	Battery current measurement; discharge current is a negative current reading. DC Amps.	DC Amps	
34	BATTERY VOLTAGE	Total UPS Battery Voltage reading (DC Volts)	V dc	
35	% BATTERY LEFT	% of useful stored energy remaining (0% is fully discharged)	%	
36	BATTERY TIME REMAINING	Estimated seconds until DCUV for the current load and state of charge of the battery (even if not "On Battery")	Seconds	
37	BATTERY CHARGE TIME	Estimated seconds required to fully charge (Float) the battery	Seconds	
38	PEAK INVERTER CURRENT PHASE A	A measure of the Inverter output peak phase A current. Service Measure		
39	PEAK INVERTER CURRENT PHASE B	A measure of the Inverter output peak phase B current. Service Measure		
40	PEAK INVERTER CURRENT PHASE C	A measure of the Inverter output peak phase C current. Service Measure		
41	AVG INPUT CURRENT 3 PHASE SUM	Average sum of the 3 phase input currents. Service Measure		
42	BATTERY DCUV BAR CHART	Battery voltage lower limit at which inverter must shut down; may vary dynamically with load.	V dc	
43	INPUT CURRENT BAR CHART	Rated value of Input Current, to compare against Input Phase Current readings. RMS Amps.	Amps rms	
44	LOW BATTERY WARNING V BAR CHART	Battery voltage level at which UPS signals Low Battery warning; may vary dynamically with load.	V dc	
45	DC VOLTS BAR CHART	Nominal DC Link value, to compare against DC Link Volts reading. DC Volts. Service Measure	V dc	
46	BATTERY CHARGING CURRENT BAR CHART	Rated (limit) value for Battery Charging current; may vary with load. DC Amps.	DC Amps	
47	BATTERY DISCHARGING CURRENT BAR CHART	Rated value (100%) for Battery Discharge current. DC Amps.	DC Amps	
48	% LOAD PHASE A	Output Load on Phase A, in per cent. Normally the greater of VA and Watts. For a single phase UPS, the % Load for the whole UPS is reported in this Phase A meter.	%	

49	% LOAD PHASE B	Output Load on Phase B, in per cent.	%	
50	% LOAD PHASE C	Output Load on Phase C, in per cent.	%	
51	OUTPUT VA PHASE A	Output VA on Phase A, in VA	VA	
52	OUTPUT VA PHASE B	Output VA on Phase B, in VA	VA	
53	OUTPUT VA PHASE C	Output VA on Phase C, in VA	VA	
54	BYPASS VOLTS PHASE A	RMS Voltage measured at the input of the Bypass feed, if the UPS has a separate Bypass feed, measured line A to neutral.	V rms	
55	BYPASS VOLTS PHASE B	RMS Voltage measured at the input of the Bypass feed, if the UPS has a separate Bypass feed, measured line B to neutral.	V rms	
56	BYPASS VOLTS PHASE C	RMS Voltage measured at the input of the Bypass feed, if the UPS has a separate Bypass feed, measured line C to neutral.	V rms	
57	INPUT VOLTS PHASE A	RMS Voltage measured at the Utility Input of the UPS, measured phase A to neutral.	V rms	
58	INPUT VOLTS PHASE B	RMS Voltage measured at the Utility Input of the UPS, measured phase B to neutral.	V rms	
59	INPUT VOLTS PHASE C	RMS Voltage measured at the Utility Input of the UPS, measured phase C to neutral.	V rms	
60	INVERTER VOLTS PHASE A	Apparent Inverter output voltage, measured phase A to neutral (may be scaled by transformer).	V rms	
61	INVERTER VOLTS PHASE B	Apparent Inverter output voltage, measured phase B to neutral (may be scaled by transformer).	V rms	
62	INVERTER VOLTS PHASE C	Apparent Inverter output voltage, measured phase C to neutral (may be scaled by transformer).	V rms	
63	AMBIENT TEMPERATURE	Temperature measurement of the room or cabinet; may be indirectly measured. In degrees Centigrade.	deg C	
64	HEATSINK TEMPERATURE	Temperature measurement at the main power unit in the module; normally, the Inverter. In degrees Centigrade.	deg C	
65	POWER SUPPLY TEMPERATURE	Temperature measurement of rectifier, charger, boost converter, or control power supply. In degrees Centigrade.	deg C	
66	LOAD CURRENT PHASE A	Output (load) RMS phase A current, in RMS Amps.	Amps rms	
67	LOAD CURRENT PHASE B	Output (load) RMS phase B current, in RMS Amps.	Amps rms	
68	LOAD CURRENT PHASE C	Output (load) RMS phase C current, in RMS Amps.	Amps rms	
69	LOAD CURRENT PHASE A BAR CHART	100% rated value for the Load Current. Compared against Load Current reading to create the phase % Load bar chart. Phase A, but usually equal to B and C bar charts as well.	Amps rms	
70	LOAD CURRENT PHASE B BAR CHART	100% rated value for the Load Current for Phase B. Usually equal to phase A bar chart.	Amps rms	
71	LOAD CURRENT PHASE C BAR CHART	100% rated value for the Load Current for Phase C. Usually equal to phase A bar chart.	Amps rms	
72	OUTPUT VA BAR CHART	Rated Output VA of the UPS, for all phases. (Units: VA)	VA	
73	DATE	Current Date reading.		
74	TIME	Current Time reading.		
75	POSITIVE DC LINK RAIL VOLTAGE	Voltage for bipolar + DC link. Service Measure	V dc	
76	NEGATIVE DC LINK RAIL VOLTAGE	Voltage for bipolar - DC link. Service Measure	V dc	
77	AUTO-BALANCE VOLTAGE	DC Voltage content of Output. Service Measure.	V dc	
78	BATTERY TEMPERATURE	Temperature of the Battery or Battery Pack, in degrees Centigrade	deg C	
79	OUTPUT VOLTS A	RMS Voltage measured at the Output of the UPS (i.e. that applied to the load), measured phase A to neutral.	V rms	
80	OUTPUT VOLTS B	RMS Voltage measured at the Output of the UPS (i.e. that applied to the load), measured phase B to neutral.	V rms	
81	OUTPUT VOLTS C	RMS Voltage measured at the Output of the UPS (i.e. that applied to the load), measured phase C to neutral.	V rms	
82	NEUTRAL CURRENT	RMS current in the output neutral line. RMS Amps.	Amps rms	
83	OUTPUT WATTS PHASE A	Output watts for the load on Phase A.	Watts	
84	OUTPUT WATTS PHASE B	Output watts for the load on Phase B.	Watts	
85	OUTPUT WATTS PHASE C	Output watts for the load on Phase C.	Watts	
86	OUTPUT WATTS PHASE A, B, C BAR CHART	100% rated value for the output watts per phase; compared to per phase Output Watt readings for bar chart meters.	Watts	
87	RECTIFIER DC CURRENT	DC current rectifier to DC link. Service measure	DC Amps	
88	POSITIVE BATTERY VOLTAGE	Positive side Voltage for bipolar battery	V dc	
89	NEGATIVE BATTERY VOLTAGE	Negative side Voltage for bipolar battery. Absolute value - always a positive reading.	V dc	
90	POSITIVE BATTERY CURRENT	Current reading for Positive side of bipolar battery, DC Amps; discharge current is a negative reading	DC Amps	
91	NEGATIVE BATTERY CURRENT	Current reading for Negative side of for bipolar battery, DC Amps; discharge current is a negative reading here as well.	DC Amps	
92	LINE EVENT COUNTER	Count of Input Line "Events" which the UPS protected against. Normally counts unfiltered On Battery events, but may include other protection events. Volatile counter which can be reset by the UPS when the count rolls over some upper limit.	Counts	Can be 8, 16, or 32 bit counter internally. Reset to 0 at powerup and rollover. Intent is to count protection events, where the UPS saved the load. List in the XCP Compliance doc any events other than OnBattery which are counted.
93	Output V1%	Ratio of acutal meter value to system nominal rating	Percent	
94	Output V2%	Ratio of acutal meter value to system nominal rating	Percent	
95	Output V3%	Ratio of acutal meter value to system nominal rating	Percent	
96	Output I1 %	Ratio of acutal meter value to system nominal rating	Percent	

97	Output I2 %	Ratio of acutal meter value to system nominal rating	Percent	
98	Output I3 %	Ratio of acutal meter value to system nominal rating	Percent	
99	Input V1%	Ratio of acutal meter value to system nominal rating	Percent	
100	Input V2%	Ratio of acutal meter value to system nominal rating	Percent	
101	Input V3%	Ratio of acutal meter value to system nominal rating	Percent	
102	Input I1 %	Ratio of acutal meter value to system nominal rating	Percent	
103	Input I2 %	Ratio of acutal meter value to system nominal rating	Percent	
104	Input I3 %	Ratio of acutal meter value to system nominal rating	Percent	
105	Ground Current		Amps rms	
106	Output Crest Factor L1	Output current Crest factor, phase 1	Percent	
107	Output Crest Factor L2	Output current Crest factor	Percent	
108	Output Crest Factor L3	Output current Crest factor	Percent	
109	Output KW Hour	Output kilowatt-hours	KWH	For large systems, need KWH instead of WH to fit well in 32-bit integers
110	Input Voltage THD Line 1	Total Harmonic Distortion measure	Percent	
111	Input Voltage THD Line 2		Percent	
112	Input Voltage THD Line 3		Percent	
113	Input Current THD Line 1		Percent	
114	Input Current THD Line 2		Percent	
115	Input Current THD Line 3		Percent	
116	Output Voltage THD Line 1		Percent	
117	Output Voltage THD Line 2		Percent	
118	Output Voltage THD Line 3		Percent	
119	Output Current THD Line 1		Percent	
120	Output Current THD Line 2		Percent	
121	Output Current THD Line 3		Percent	
122	Input Crest Factor L1	Input current Crest factor, phase 1	Percent	
123	Input Crest Factor L2	Input current Crest factor	Percent	
124	Input Crest Factor L3	Input current Crest factor	Percent	
125	Input KW Hour	Input kilowatt-hours	KWH	For large systems, need KWH instead of WH to fit well in 32-bit integers
126	Battery Life Remaining	Estimated percentage of nominal battery life remaining.	Percent	Based on age, usage, and service temperature.
127	Secondary Neutral Current	RMS current in the neutral line of a secondary power circuit.	Amps rms	Initially for dual-input PDU.
128	Secondary Ground Current	Current measured in a secondary power circuit	Amps rms	Initially for dual-input PDU.
129	Hours of Operation	Accumulated hours that the UPS has been running.	Hours	