

Measuring class parameter [Integer format data]

Holding Register Parameter [Read : Function code : 03H]				Register Address [Hex]	
Description	Length (bytes)	Data Format	Units	High Byte	Low Byte
Phase 1 line to neutral volts.	4	ULONG	0.01V	00	00
Phase 2 line to neutral volts.	4	ULONG	0.01V	00	02
Phase 3 line to neutral volts.	4	ULONG	0.01V	00	04
Phase 1 current.	4	ULONG	0.001A	00	06
Phase 2 current.	4	ULONG	0.001A	00	08
Phase 3 current.	4	ULONG	0.001A	00	0A
Phase 1 active power.	4	LONG	0.001kW	00	0C
Phase 2 active power.	4	LONG	0.001kW	00	0E
Phase 3 active power.	4	LONG	0.001kW	00	10
Phase 1 reactive power.	4	LONG	0.001kvar	00	12
Phase 2 reactive power.	4	LONG	0.001kvar	00	14
Phase 3 reactive power.	4	LONG	0.001kvar	00	16
Phase 1 apparent power.	4	ULONG	0.001kVA	00	18
Phase 2 apparent power.	4	ULONG	0.001kVA	00	1A
Phase 3 apparent power.	4	ULONG	0.001kVA	00	1C
Phase 1 power factor (1).	2	INT	0.001	00	1E
Phase 2 power factor (1).	2	INT	0.001	00	1F
Phase 3 power factor (1).	2	INT	0.001	00	20
Phase 1 phase angle.	2	INT	0.01°	00	21
Phase 2 phase angle.	2	INT	0.01°	00	22
Phase 3 phase angle.	2	INT	0.01°	00	23
Line 1 to Line 2 volts.	4	ULONG	0.01V	00	24
Line 2 to Line 3 volts.	4	ULONG	0.01V	00	26
Line 3 to Line 1 volts.	4	ULONG	0.01V	00	28
Frequency of supply voltages.	2	UINT	0.01Hz	00	2A
Total system active power.	4	LONG	0.001kW	00	2C
Total system reactive power.	4	LONG	0.001kvar	00	2E
Total system apparent power.	4	LONG	0.001kVA	00	30
Total system power factor (1).	2	INT	0.001	00	32
Total system phase angle.	2	INT	0.01°	00	33
Sum of line currents.	4	ULONG	0.001A	00	34
Average line to neutral volts.	4	ULONG	0.01V	00	36
Average line to line volts.	4	ULONG	0.01V	00	38
Average line current.	4	ULONG	0.001A	00	3A
Neutral current.	4	ULONG	0.001A	00	3C
Nature of L1 load (Resistive=1, inductive=2, capacitive =3, Non Load=4)	2	UINT	None	00	46
Nature of L2 load (Resistive=1, inductive=2, capacitive =3, Non Load=4)	2	UINT	None	00	47

Nature of L3 load (Resistive=1, inductive=2, capacitive =3, Non Load=4)	2	UINT	None	00	48
Nature of the system load(Resistive=1, inductive=2, capacitive =3, Non Load=4)	2	UINT	None	00	49
Phase 1 voltage THD (2).	2	UINT	0.01%	00	5D
Phase 2 voltage THD (2).	2	UINT	0.01%	00	5E
Phase 3 voltage THD (2).	2	UINT	0.01%	00	5F
Phase 1 current THD	2	UINT	0.01%	00	60
Phase 2 current THD	2	UINT	0.01%	00	61
Phase 3 current THD	2	UINT	0.01%	00	62
Average voltage THD (2).	2	UINT	0.01%	00	63
Average line current THD.	2	UINT	0.01%	00	64
Total system active power demand (3).	4	LONG	0.001kW	00	66
Total system reactive power demand (3).	4	LONG	0.001kvar	00	68
Total system apparent power demand.	4	ULONG	0.001kVA	00	6A
Phase 1 current demand.	4	ULONG	0.001A	00	6C
Phase 2 current demand.	4	ULONG	0.001A	00	6E
Phase 3 current demand.	4	ULONG	0.001A	00	70
Neutral current demand.	4	ULONG	0.001A	00	72
Import active power demand	4	ULONG	0.001kW	00	74
Export active power demand	4	ULONG	0.001kW	00	76
Maximum total system active power demand (3).	4	LONG	0.001kW	00	7C
Maximum total system reactive power demand (3).	4	LONG	0.001kvar	00	7E
Maximum total system apparent power demand.	4	ULONG	0.001kVA	00	80
Maximum phase 1 current demand.	4	ULONG	0.001A	00	82
Maximum phase 2 current demand.	4	ULONG	0.001A	00	84
Maximum phase 3 current demand.	4	ULONG	0.001A	00	86
Maximum neutral current demand.	4	ULONG	0.001A	00	88
Maximum import active power demand	4	ULONG	0.001kW	00	8A
Maximum export active power demand	4	ULONG	0.001kW	00	8C
Total import active energy.	4	ULONG	0.01kWh	04	00
Total export active energy.	4	ULONG	0.01kWh	04	02
Total active Energy.	4	ULONG	0.01kWh	04	04
Total import reactive energy.	4	ULONG	0.01kvarh	04	08
Total export reactive energy.	4	ULONG	0.01kvarh	04	0A
Total reactive Energy.	4	ULONG	0.01kvarh	04	0C
Total apparent energy.	4	ULONG	0.01kVA	04	10
L1 import active Energy	4	ULONG	0.01kWh	04	14
L2 import active Energy	4	ULONG	0.01kWh	04	16
L3 import active Energy	4	ULONG	0.01kWh	04	18
L1 export active Energy	4	ULONG	0.01kWh	04	1A
L2 export active Energy	4	ULONG	0.01kWh	04	1C
L3 export active Energy	4	ULONG	0.01kWh	04	1E
L1 total active Energy	4	ULONG	0.01kWh	04	20

L2 total active Energy	4	ULONG	0.01kWh	04	22
L3 total active Energy	4	ULONG	0.01kWh	04	24
L1 import reactive energy	4	ULONG	0.01kvarh	04	26
L2 import reactive energy	4	ULONG	0.01kvarh	04	28
L3 import reactive energy	4	ULONG	0.01kvarh	04	2A
L1 export reactive energy	4	ULONG	0.01kvarh	04	2C
L2 export reactive energy	4	ULONG	0.01kvarh	04	2E
L3 export reactive energy	4	ULONG	0.01kvarh	04	30
L1 total reactive energy	4	ULONG	0.01kvarh	04	32
L2 total reactive energy	4	ULONG	0.01kvarh	04	34
L3 total reactive energy	4	ULONG	0.01kvarh	04	36

Notes:

1. The power factor has its sign adjusted to indicate the direction of the current. Positive refers to forward current, negative refers to reverse current.
2. In 3P3W mode, L1 represents the line voltage THD of L1-2, L2 represents the line voltage harmonic content of L2-3, and L3 represents the Line voltage THD of L3-1. In 3P4W, 1P2W, 1P3W and other modes, L1, L2 and L3 respectively represent the corresponding phase voltage harmonic content.
3. The power sum demand calculation is for import – export.