

Import/Export MultiCube Models 9.1 to 9.4

March 2002 - Software Version 9.05

This addendum to the standard MultiCube manual documents the changes relevant to the Import/Export versions (models 9.1 to 9.4)

Display Pages

MultiCube Type 9.1 Menus			
I	V	P	>>
Phase Currents	Phase Voltages	System PF, Hz, W	Phase 1 PF, V, I
	Line-Line Voltages	Import Wh	Phase 2 PF, V, I
		Export Wh	Phase 3 PF, V, I
		Import kvarh	
		Export kvarh	
		Total kvarh	
		Phase Watts	

MultiCube Type 9.2 Menus			
I	V	P	>>
Phase Currents	Phase Voltages	System PF, Hz, W	Phase 1 PF, V, I
	Line-Line Voltages	System PF, Hz, VA	Phase 2 PF, V, I
		System PF, Hz, var	Phase 3 PF, V, I
		Import Wh	
		Export Wh	
		Import kvarh	
		Export kvarh	
		Total kvarh	
		Phase Watts	

MultiCube Type 9.3 Menus			
I	V	P	>>
Phase Currents	Phase Voltages	System PF, Hz, W	Phase 1 PF, V, I
	Line-Line Voltages	System PF, Hz, VA	Phase 2 PF, V, I
		System PF, Hz, var	Phase 3 PF, V, I
		Phase Watts	
		Phase VA	
		Phase var	
		Import Wh	
		Export Wh	
		Import kvarh	
		Export kvarh	
		Total kvarh	

MultiCube Type 9.4 Menus			
I	V	P	>>
Phase Currents	Phase Voltages	System PF, Hz, W	Phase 1 PF, V, I
Peak Hold Currents	Line-Line Voltages	System PF, Hz, VA	Phase 2 PF, V, I
Neutral Current	Peak Hold Voltages	System PF, Hz, var	Phase 3 PF, V, I
Ampere Demand		Phase Watts	
Pk Ampere Demand		Phase VA	
		Phase var	
		Peak MD, Rolling MD, kW	
		Import Wh	
		Export Wh	
		Import kvarh	
		Export kvarh	
		Total kvarh	

Table 2 Accumulated Energy Readings

Offset	Address	Contents	Format	Bytes	Words	Access
0	512	Energy Scale Hi	Unsigned Long	4	2	Read Only
1	513	Energy Scale Lo				
2	514	Import kWh Hi	Unsigned Long	4	2	Read/Write
3	515	Import kWh Lo				
4	516	Export kVAh Hi	Unsigned Long	4	2	Read/Write
5	517	Export kVAh Lo				
6	518	Import kvarh Hi	Unsigned Long	4	2	Read/Write
7	519	Import kvarh Lo				
8	520	Export kvarh Hi	Unsigned Long	4	2	Read/Write
9	521	Export kvarh Lo				

This table refers to Modbus energy registers in the MultiCube import/export meters, software version 9.05. It replaces the Table 2 published in the standard ‘MultiCube Options – Modbus Communications - Installation and Operation’ booklet.

Table 11 Instantaneous Meter Values

Table 11 of the MultiCube import/export meter Version 9.05 provides export kW values as negative numbers. Frequency is transmitted from the meter scaled by a factor of 100. For example a measured frequency of 50.00 would appear in Table 11 as an integer value 5000.

All other parameters remain unchanged from those detailed in the standard MultiCube documentation.

NOTE: Import/Export kW values are only available on Modbus Options Units with software versions 1.04 or greater. Earlier versions will provide positive readings irrespective of power direction.

Table 16 Current and Voltage Demand

Rolling demand voltage and Peak Rolling demand voltage measurements are not available on Version 9.05 of the MultiCube. These values appear as Zeros in Table 16.