

DM-50 Register Map Ver 1.02

1 reg = 2bytes (16bit)
 short int = 16 bit
 int = 32 bit
 long int = 64 bit
 neg P = export
 neg Q = capacitive

Instantaneous Parameter								
Reg Addr (Hex)	Register	(R/W)	Unit	Multiplier	Format	Comment	Reg Byte Count	Reg Addr (Dec)
0000	Ampere L1	R	A	0.001	unsigned int		4	0
0002	Ampere L2	R	A	0.001	unsigned int		4	2
0004	Ampere L3	R	A	0.001	unsigned int		4	4
0006	Ampere Neutral	R	A	0.001	unsigned int		4	6
0008	Voltage L1	R	V	0.1	unsigned int		4	8
000A	Voltage L2	R	V	0.1	unsigned int		4	10
000C	Voltage L3	R	V	0.1	unsigned int		4	12
000E	Voltage L12	R	V	0.1	unsigned int		4	14
0010	Voltage L23	R	V	0.1	unsigned int		4	16
0012	Voltage L31	R	V	0.1	unsigned int		4	18
0014	Empty			-			2	20
0015	Frequency	R	Hz	0.01	unsigned short int		2	21
0016	kW L1	R	W	0.1	int		4	22
0018	kW L2	R	W	0.1	int	neg => export	4	24
001A	kW L3	R	W	0.1	int		4	26
001C	kVAr L1	R	VAr	0.1	int		4	28
001E	kVAr L2	R	VAr	0.1	int	neg => capacitive	4	30
0020	kVAr L3	R	VAr	0.1	int		4	32
0022	kVA L1	R	VA	0.1	unsigned int		4	34
0024	kVA L2	R	VA	0.1	unsigned int		4	36
0026	kVA L3	R	VA	0.1	unsigned int		4	38
0028	PF L1	R		0.001	short int		2	40
0029	PF L2	R		0.001	short int		2	41
002A	PF L3	R		0.001	short int		2	42
002B	PF Average	R		0.001	short int	neg => capacitive	2	43
002C	Cos L1	R		0.001	short int		2	44
002D	Cos L2	R		0.001	short int		2	45
002E	Cos L3	R		0.001	short int		2	46
002F	Cos Average	R		0.001	short int		2	47
Total Registers = 48								

Instantaneous Parameter 2								
Reg Addr (Hex)	Register	(R/W)	Unit	Multiplier	Format	Comment	Reg Byte Count	Reg Addr (Dec)
0100	total kW	R	W	0.1	int	neg => export	4	256
0102	total kVAr	R	VAr	0.1	int	neg => capacitive	4	258
0104	total kVA	R	VA	0.1	unsigned int		4	260
Total Registers = 3								

Setting Parameter								
Reg Addr (Hex)	Register	(R/W)	Unit	Multiplier	Format	Data Value	Reg Byte Count	Reg Addr (Dec)
0F00	model	R	-	-	unsigned short int	fixed 0x1050	2	3840
0F01	firmware Ver	R	-	0.01	unsigned short int	103	2	3841
0F02	ct ratio	R/W	-	1	unsigned short int	1 ~ 2000	2	3842
0F03	empty						2	3843
0F04	empty						2	3844
0F05	mapping Ver	R	-	0.01	unsigned short int	102	2	3845
0F06	operation hour	R	min	1	unsigned int		4	3846
0F08	over Current	R/W	%	1	unsigned short int	OFF = 0 or 10 ~ 110	2	3848
0F09	under Current	R/W	%	1	unsigned short int	OFF = 0 or 5 ~ 100	2	3849
0F0A	over Voltage	R/W	V	1	unsigned short int	OFF = 0 or 200 ~ 270	2	3850
0F0B	under Voltage	R/W	V	1	unsigned short int	OFF = 0 or 70 ~ 220	2	3851
0F0C	over Frequency	R/W	Hz	1	unsigned short int	OFF = 0 or 45 ~ 65	2	3852
0F0D	under Frequency	R/W	Hz	1	unsigned short int		2	3853
0F0E	lo PF	R/W		0.01	short int	OFF = 0 or 85 ~ 100 cap (neg),	2	3854
0F0F	lo Cos	R/W		0.01	short int	85 ~ 100 ind	2	3855
0F10	relay on time delay	R/W	s	1	unsigned short int		2	3856
0F11	relay off time delay	R/W	s	1	unsigned short int	1 ~ 200	2	3857
0F12	1st general setting	R		1	unsigned short int		2	3858
0F13	2nd general setting	R		1	unsigned short int		2	3859
Total Registers = 20								

2nd General Setting High Byte							
bit15	bit14	bit13	bit12	bit11	bit10	bit9	bit8
reserved for internal MCU setting (can be ignore)				Empty	Network Type	Scroll Phase	Empty
				-	0 = 3P4W / 3P3W 1 = 1P2W	0 = Off 1 = Auto	-

2nd General Setting Low Byte							
bit7	bit6	bit5	bit4	bit3	bit2	bit1	bit0
Reserved							

1st General Setting High Byte							
bit15	bit14	bit13	bit12	bit11	bit10	bit9	bit8
Alarm Flag							
lo Cos	lo PF	under Frequency	over Frequency	under Voltage	over Voltage	under Current	over Current

1st General Setting Low Byte							
bit7	bit6	bit5	bit4	bit3	bit2	bit1	bit0
Empty				Default Parameter Display			
000 = Ampere, 001 = Voltage, 010 = Frequency 011 = PF, 100 = Cos 101 = kW, 110 = kVAr, 111 = kVA							