

40126		power		var
40127	RO	Phase C reactive		× 0.01, unit:
40128		power		var
40129	RO	Total reactive		× 0.01, unit:
40130		power		var
40131	RO	Phase A	LUINT32	× 0.01, unit:
40132		apparent power		VA
40133	RO	Phase B		× 0.01, unit:
40134		apparent power		VA
40135	RO	Phase C		× 0.01, unit:
40136		apparent power		VA
40137	RO	Total apparent		× 0.01, unit:
40138		power		VA
40139	RO	Phase A power	INT16	× 0.001
40140	RO	Phase B power		× 0.001
40141	RO	Phase C power		× 0.001
40142	RO	Total power		× 0.001
		factor		



40143	RO	Frequency	UINT16	× 0.01, unit: Hz
-------	----	-----------	--------	---------------------

9.5.2 Energy Data Registers

Register No.	Access	Description	Data Type	Remark
41001	RO	Imp. kWh	LUINT32	× 0.1, unit: kWh
41002				
41003	RO	Exp. kWh		× 0.1, unit: kWh
41004				
41005	RO	Total kWh		× 0.1, unit: kWh
41006				
41007	RO	Imp. kvarh		× 0.1, unit: kvarh
41008				
41009	RO	Exp. kvarh		× 0.1, unit: kvarh
41010				
41011	RO	Total kvarh	× 0.1, unit: kvarh	
41012				
41013	RO	Total kWh of tariff 1#	× 0.1, unit: kWh	
41014				
41015	RO	Total kWh of	× 0.1, unit:	



41016		tariff 2#		kWh
41017	RO	Total kWh of		× 0.1, unit:
41018		tariff 3#		kWh
41019	RO	Total kWh of	LUINT32	× 0.1, unit:
41020		tariff 4#		kWh
41021	RO	Total kvarh of		× 0.1, unit:
41022		tariff 1#		kvarh
41023	RO	Total kvarh of		× 0.1, unit:
41024		tariff 2#		kvarh
41025	RO	Total kvarh of		× 0.1, unit:
41026		tariff 3#		kvarh
41027	RO	Total kvarh of		× 0.1, unit:
41028		tariff 4#		kvarh
41029	RO	Reserve		× 0.1, unit:
41030				kWh
41031	RO	Reserve	× 0.1, unit:	
41032			kvarh	

9.5.3 Historical Energy Data Registers

9.5.3.1 Daily Energy Data Registers

Register	Access	Description	Remark
----------	--------	-------------	--------



No.			
41201	RO	Num. of the record	Must read this register alone
41202-41215	RO	Record of last 1st day	Must read this 14 registers together
41216-41229	RO	Record of last 2nd day	Must read this 14 registers together
41230-41621	RO
41622-41635	RO	Record of last 31 st day	Must read this 14 registers together

Content of the daily energy data:

Register No.	Access	Description	Data type	Remark	
1	RO	Time	LUINT32	Unix time, year, month	
2					
3	RO	Total Imp. kWh		× 0.1, unit: kWh	
4					
5	RO	Total Exp. kWh			× 0.1, unit: kWh
6					
7	RO	Total kWh			× 0.1, unit: kWh
8					
9	RO	Total Imp.	× 0.1, unit: kvarh		



10		kvarh	
11	RO	Total Exp.	× 0.1, unit: kvarh
12		kvarh	
13	RO	Total kvarh	× 0.1, unit: kvarh
14			

9.5.3.2 Monthly Energy Data Registers

Register No.	Access	Description	Remark
42001	RO	Num. of the record	Must read this one register alone
42002-42015	RO	Record of last 1st month	Must read this 14 registers together
42016-42029	RO	Record of last 2nd month	Must read this 14 registers together
42030-42155	RO
42156-42169	RO	Record of last 12th month	Must read this 14 registers together

Content of the monthly energy data:

Register No.	Access	Description	Data Type	Remark
1	RO	Time	LUINT32	Unix time, year,
2				month



3	RO	Imp. kWh		× 0.1, unit: kWh
4				
5	RO	Exp. kWh		× 0.1, unit: kWh
6				
7	RO	Total kWh		× 0.1, unit: kWh
8				
9	RO	Imp. kvarh		× 0.1, unit: kvarh
10				
11	RO	Exp. kvarh		× 0.1, unit: kvarh
12				
13	RO	Total kvarh		× 0.1, unit: kvarh
14				

9.5.3.3 Yearly Energy Data Registers

Register No.	Access	Description	Remark
43001	RO	Num. of the record	Must read this one register alone
43002-43015	RO	Record of last 1st year	Must read this 14 registers together
43016-43029	RO	Record of last 2nd year	Must read this 14 registers together
43030-43127	RO
43128-43141	RO	Record of last 10th year	Must read this 14 registers together



Content of the yearly energy data:

Register No.	Access	Description	Data Type	Remark
1	RO	Time	LUINT32	Unix time, year, month
2				
3	RO	Imp. kWh		× 0.1, unit: kWh
4				
5	RO	Exp. kWh		× 0.1, unit: kWh
6				
7	RO	Total kWh		× 0.1, unit: kWh
8				
9	RO	Imp. kvarh		× 0.1, unit: kvarh
10				
11	RO	Exp. kvarh		× 0.1, unit: kvarh
12				
13	RO	Total kvarh		× 0.1, unit: kvarh
14				

9.5.3.4 Day Freeze Energy Data Registers

Register No.	Access	Description	Remark
43501	RO	Present day Freezed kWh value	
43502	RO	Time	Unix Time



43503			
43504	RO	Present day 0:00 Total Active Energy	
43505			
43506	RO	Present day 0:15 Total Active Energy	
43507			
43508	RO	Present day 0:30 Total Active Energy	
43509			
43510	RO	Present day 0:45 Total Active Energy	
43511			
43512	RO	Present day 1:00 Total Active Energy	
43513			
43514	RO	Present day 1:15 Total Active Energy	
43515			
43516	RO	Present day 1:30 Total Active Energy	
43517			
43518	RO	Present day 1:45 Total Active Energy	
43519			
43520	RO	Present day 2:00 Total Active Energy	
43521			
43522	RO	Present day 2:15 Total Active	



43523		Energy	
43524	RO	Present day 2:30 Total Active	
43525		Energy	
43526	RO	Present day 2:45 Total Active	
43527		Energy	
43528	RO	Present day 3:00 Total Active	
43529		Energy	
43530	RO	Present day 3:15 Total Active	
43531		Energy	
43532	RO	Present day 3:30 Total Active	
43533		Energy	
43534	RO	Present day 3:45 Total Active	
43535		Energy	
43536	RO	Present day 4:00 Total Active	
43537		Energy	
43538	RO	Present day 4:15 Total Active	
43539		Energy	
43540	RO	Present day 4:30 Total Active	
43541		Energy	
43542	RO	Present day 4:45 Total Active	



43543		Energy	
43544	RO	Present day 5:00 Total Active	
43545		Energy	
43546	RO	Present day 5:15 Total Active	
43547		Energy	
43548	RO	Present day 5:30 Total Active	
43549		Energy	
43550	RO	Present day 5:45 Total Active	
43551		Energy	
43552	RO	Present day 6:00 Total Active	
43553		Energy	
43554	RO	Present day 6:15 Total Active	
43555		Energy	
43556	RO	Present day 6:30 Total Active	
43557		Energy	
43558	RO	Present day 6:45 Total Active	
43559		Energy	
43560	RO	Present day 7:00 Total Active	
43561		Energy	
43562	RO	Present day 7:15 Total Active	



43563		Energy	
43564	RO	Present day 7:30 Total Active	
43565		Energy	
43566	RO	Present day 7:45 Total Active	
43567		Energy	
43568	RO	Present day 8:00 Total Active	
43569		Energy	
43570	RO	Present day 8:15 Total Active	
43571		Energy	
43572	RO	Present day 8:30 Total Active	
43573		Energy	
43574	RO	Present day 8:45 Total Active	
43575		Energy	
43576	RO	Present day 9:00 Total Active	
43577		Energy	
43578	RO	Present day 9:15 Total Active	
43579		Energy	
43580	RO	Present day 9:30 Total Active	
43581		Energy	
43582	RO	Present day 9:45 Total Active	



43583		Energy	
43584	RO	Present day 10:00 Total Active	
43585		Energy	
43586	RO	Present day 10:15 Total Active	
43587		Energy	
43588	RO	Present day 10:30 Total Active	
43589		Energy	
43590	RO	Present day 10:45 Total Active	
43591		Energy	
43592	RO	Present day 11:00 Total Active	
43593		Energy	
43594	RO	Present day 11:15 Total Active	
43595		Energy	
43596	RO	Present day 11:30 Total Active	
43597		Energy	
43598	RO	Present day 11:45 Total Active	
43599		Energy	
43600	RO	Present day 12:00 Total Active	
43601		Energy	
43602	RO	Present day 12:15 Total Active	



43603		Energy	
43604	RO	Present day 12:30 Total Active	
43605		Energy	
43606	RO	Present day 12:45 Total Active	
43607		Energy	
43608	RO	Present day 13:00 Total Active	
43609		Energy	
43610	RO	Present day 13:15 Total Active	
43611		Energy	
43612	RO	Present day 13:30 Total Active	
43613		Energy	
43614	RO	Present day 13:45 Total Active	
43615		Energy	
43616	RO	Present day 14:00 Total Active	
43617		Energy	
43618	RO	Present day 14:15 Total Active	
43619		Energy	
43620	RO	Present day 14:30 Total Active	
43621		Energy	
43622	RO	Present day 14:45 Total Active	



43623		Energy	
43624	RO	Present day 15:00 Total Active	
43625		Energy	
43626	RO	Present day 15:15 Total Active	
43627		Energy	
43628	RO	Present day 15:30 Total Active	
43629		Energy	
43630	RO	Present day 15:45 Total Active	
43631		Energy	
43632	RO	Present day 16:00 Total Active	
43633		Energy	
43634	RO	Present day 16:15 Total Active	
43635		Energy	
43636	RO	Present day 16:30 Total Active	
43637		Energy	
43638	RO	Present day 16:45 Total Active	
43639		Energy	
43640	RO	Present day 17:00 Total Active	
43641		Energy	
43642	RO	Present day 17:15 Total Active	



43643		Energy	
43644	RO	Present day 17:30 Total Active	
43645		Energy	
43646	RO	Present day 17:45 Total Active	
43647		Energy	
43648	RO	Present day 18:00 Total Active	
43649		Energy	
43650	RO	Present day 18:15 Total Active	
43651		Energy	
43652	RO	Present day 18:30 Total Active	
43653		Energy	
43654	RO	Present day 18:45 Total Active	
43655		Energy	
43656	RO	Present day 19:00 Total Active	
43657		Energy	
43658	RO	Present day 19:15 Total Active	
43659		Energy	
43660	RO	Present day 19:30 Total Active	
43661		Energy	
43662	RO	Present day 19:45 Total Active	



43663		Energy	
43664	RO	Present day 20:00 Total Active	
43665		Energy	
43666	RO	Present day 20:15 Total Active	
43667		Energy	
43668	RO	Present day 20:30 Total Active	
43669		Energy	
43670	RO	Present day 20:45 Total Active	
43671		Energy	
43672	RO	Present day 21:00 Total Active	
43673		Energy	
43674	RO	Present day 21:15 Total Active	
43675		Energy	
43676	RO	Present day 21:30 Total Active	
43677		Energy	
43678	RO	Present day 21:45 Total Active	
43679		Energy	
43680	RO	Present day 22:00 Total Active	
43681		Energy	
43682	RO	Present day 22:15 Total Active	



43683		Energy	
43684	RO	Present day 22:30 Total Active	
43685		Energy	
43686	RO	Present day 22:45 Total Active	
43687		Energy	
43688	RO	Present day 23:00 Total Active	
43689		Energy	
43690	RO	Present day 23:15 Total Active	
43691		Energy	
43692	RO	Present day 23:30 Total Active	
43693		Energy	
43694	RO	Present day 23:45 Total Active	
43695		Energy	

note:

1. Present day freeze kWh data will refresh and update day by day, the data will be freeze each 15 mins, register 43502 & 43503 is present data start time.
2. The amount of present day freeze kWh be used to indicate the froze kWh times. Each time freeze will add + 1
3. Freeze total active energy is aggregate value



9.5.3.5 Yesterday Freeze Energy Data Registers

Register No.	Access	Description	Remark
43901	RO	Time	Unix Time
43902			
43903	RO	Yesterday 22:00	
43904		Total Active Energy	
43905	RO	Yesterday 22:15 Total Active Energy	
43906			
43907	RO	Yesterday 22:30 Total Active Energy	
43908			
43909	RO	Yesterday 22:45 Total Active Energy	
43910			
43911	RO	Yesterday 23:00	
43912		Total Active Energy	
43913	RO	Yesterday 23:15 Total Active Energy	
43914			
43915	RO	Yesterday 23:30 Total Active Energy	
43916			
43917	RO	Yesterday 23:45 Total Active Energy	
43918			



note:

1. Yesterday freeze kWh data is yesterday last two hours data saving [register 43901 & 43902]
2. Freeze total active energy is aggregate value

9.5.4 System parameter registers

Register No.	Access	Description	Data Type	Remark
44001	RO	Wiring mode	UINT16	0--1 0: 3-phase 4-wire 1: 3-phase 3-wire
44002	RW	CT ratio		1~999
44003	RW	Address		1--247
44004	RW	Baud rate		0--3 0: 2400 1: 4800 2: 9600 3: 1200
44005	RW	Pulse constant		63A:400-800(imp/kWh)(imp/kvarh) 5A:6400-10000(imp/kWh)(imp/kvarh) default:



				63A:400(imp/kWh)(i) mp/kvarh 5A:6400(imp/kWh)(i) mp/kvarh	
44006	RW	Pulse width		20—80(ms)	
44007	RW	Object of pulse output-1		0--1 0: total kWh 1: total kvarh	
44008	RW	Object of pulse output-2	UINT16	0--1 0: total kWh 1: total kvarh	
44009	RW	Reserve			
44010	RW	Reserve			
44011	RW	Reserve			
44012	RW	Reserve			
44013	RW	Reserve			
44014	RW	Multi-tariff mode			0--3, default 1 0: Time zone mode (Max. 2 time zone per year) 1: Holiday mode1 (Mon.-Fri. Working



				<p>day, Sat. - Sun. holiday)</p> <p>2: Holiday Mode2 (Sun. - Thu. Working day. Fri. - Sat. holiday)</p> <p>3: Holiday Mode3 (Mon. - Sat. Working day. Sun. holiday)</p>
44015	RW	Start time of Time zone-1: month	UINT16	1--12 (only available when in multi tariff mode)
44016	RW	Start time of Time zone-1: day		1--31 (only available when in multi tariff mode)
44017	RW	Start time of Time zone-2: month		1--12 (only available when in multi tariff mode)
44018	RW	Start time of Time zone-2: day		1--31 (only available when in multi tariff mode)
44019	RW	Num. of period for tariff list -1		1--8



44020	RW	The rate at 1st period, tariff list-1		0--3
44021	RW	Start time (hour), 1st period, tariff list-1		0--23
44022	RW	Start time (minute), 1st period, tariff list-1	UINT16	0 means 0 min. 1 means 15 min. 2 means 30 min. 3 means 45 min.
44023	RW	The rate at 2nd period, tariff list-1		0--3
44024	RW	Start time (hour), 2nd period, tariff list-1		0--23
44025	RW	Start time (minute), 2nd period, tariff list-1		0 means 0 min. 1 means 15 min. 2 means 30 min. 3 means 45 min.
44026	RW	The rate at 3rd period, tariff list-1		0--3
44027	RW	Start time (hour), 3rd period, tariff list-1		0--23
44028	RW	Start time (minute), 3rd period, tariff list-1		0 means 0 min. 1 means 15 min.



				2 means 30 min. 3 means 45 min.
44029	RW	The rate at 4th period, tariff list-1	UINT16	0--3
44030	RW	Start time (hour), 4th period, tariff list-1		0--23
44031	RW	Start time (minute), 4th period, tariff list-1		0 means 0 min. 1 means 15 min. 2 means 30 min. 3 means 45 min.
44032	RW	The rate at 5th period, tariff list-1		0--3
44033	RW	Start time (hour), 5th period, tariff list-1		0--23
44034	RW	Start time (minute), 5th period, tariff list-1		0 means 0 min. 1 means 15 min. 2 means 30 min. 3 means 45 min.
44035	RW	The rate at 6th period, tariff list-1	UINT16	0--3
44036	RW	Start time (hour), 6th period, tariff list-1		0--23



44037	RW	Start time (minute), 6th period, tariff list-1		0 means 0 min. 1 means 15 min. 2 means 30 min. 3 means 45 min.
44038	RW	The rate at 7th period, tariff list-1		0--3
44039	RW	Start time (hour), 7th period, tariff list-1		0--23
44040	RW	Start time (minute), 7th period, tariff list-1		0 means 0 min. 1 means 15 min. 2 means 30 min. 3 means 45 min.
44041	RW	The rate at 8th period, tariff list-1	UINT16	0--3
44042	RW	Start time (hour), 8th period, tariff list-1		0--23
44043	RW	Start time (minute), 8th period, tariff list-1		0 means 0 min. 1 means 15 min. 2 means 30 min. 3 means 45 min.
44044	RW	Num. of period for tariff list -2		1--8



44045	RW	The rate at 1st period, tariff list-2		0--3
44046	RW	Start time (hour), 1st period, tariff list-2		0--23
44047	RW	Start time (minute), 1st period, tariff list-2	UINT16	0 means 0 min. 1 means 15 min. 2 means 30 min. 3 means 45 min.
44048	RW	The rate at 2nd period, tariff list-2		0--3
44049	RW	Start time (hour), 2nd period, tariff list-2		0--23
44050	RW	Start time (minute), 2nd period, tariff list-2		0 means 0 min. 1 means 15 min. 2 means 30 min. 3 means 45 min.
44051	RW	The rate at 3rd period, tariff list-2		0--3
44052	RW	Start time (hour), 3rd period, tariff list-2		0--23
44053	RW	Start time (minute), 3rd period, tariff list-2	UINT16	0 means 0 min. 1 means 15 min.



				2 means 30 min. 3 means 45 min.
44054	RW	The rate at 4th period, tariff list-2		0--3
44055	RW	Start time (hour), 4th period, tariff list-2		0--23
44056	RW	Start time (minute), 4th period, tariff list-2		0 means 0 min. 1 means 15 min. 2 means 30 min. 3 means 45 min.
44057	RW	The rate at 5th period, tariff list-2		0--3
44058	RW	Start time (hour), 5th period, tariff list-2		0--23
44059	RW	Start time (minute), 5th period, tariff list-2		0 means 0 min. 1 means 15 min. 2 means 30 min. 3 means 45 min.
44060	RW	The rate at 6th period, tariff list-2	UINT16	0--3
44061	RW	Start time (hour), 6th period, tariff list-2		0--23



44062	RW	Start time (minute), 6th period, tariff list-2		0 means 0 min. 1 means 15 min. 2 means 30 min. 3 means 45 min.
44063	RW	The rate at 7th period, tariff list-2		0--3
44064	RW	Start time (hour), 7th period, tariff list-2		0--23
44065	RW	Start time (minute), 7th period, tariff list-2		0 means 0 min. 1 means 15 min. 2 means 30 min. 3 means 45 min.
44066	RW	The rate at 8th period, tariff list-2	UINT16	0--3
44067	RW	Start time (hour), 8th period, tariff list-2		0--23
44068	RW	Start time (minute), 8th period, tariff list-2		0 means 0 min. 1 means 15 min. 2 means 30 min. 3 means 45 min.
44069	RW	kWh refresh to ZERO by Panel Operation		0--1 0: No



				1: YES
44070	RW	Energy decimal point display setting		Default is 1, settable range 1-3

Note: (1) When multi tariff mode be set as time zone mode, 1st time mode default tariff #1, 2nd time mode default tariff #2

(2) If the starting time of 1st time zone is not January 1st , then default 2nd time zone goes to new year

(3) When multi-tariff mode be set as holiday mode, working day default 1st day's tariff, holiday day default tariff #2

(4) If starting time of tariff #1 is not 0, then default the last tariff will pass 0' o clock.

9.5.5 Device information registers

Register No.	Access	Description	Data Type	Remark
49001	RW	Model No.	LUI32	
49002				
49003	RW	S/N		
49004				
49005	RW	Hardware version No.	UINT16	
49006	RO	Software		



		version No. for domestic market		
49007	RO	Reserve		Reserve
49008				
49009				
49010				
49011	RW	Timing	LUI32	1 The Num. of second from Jan. 1, 1970, Greenwich mean time, support radio command
49012				
49013	RO	Error code	UINT16	
49014	RW	Second		0-59
49015	RW	Minute		0-59
49016	RW	Hour		0-23
49017	RW	Day		1-31
49018	RW	Month		1-12
49019	RW	Year		0-99

Note:



1. The UNIX system time register 49011~49012 must write simultaneously.
2. The Clock register 49014~49019 must read/ write simultaneously. Time of



origin: Jan 1, 2000.

9.5.6 Command data registers

Register No.	Access	Description	Remark
46001	WO	Clean Energy	Write 888
46002	WO	Clean historical energy	Write 888
46003	WO	Reserve	Reserve
46004	WO	Reserve	Reserve
46005	WO	Reserve	Reserve
46006	WO	Recover user default parameter	Write 888



Notice:

- The information stated in this manual can be modified without prior notice due to update need
- DFUN (ZHUHAI) CO.,LTD. reserves the right to interpret the information stated.

DFUN DFUN(ZHUHAI)CO.,LTD.
