

1.: Instantaneous parameters

| # | Modbus | | | | | Content | Remark |
|---|-------------------------|-----|-----------------|------------------|------|----------------|---|
| | Modbus register address | R/W | Register length | Data Description | Unit | | |
| 1 | 0100 | R | 2 | INT32(3+3) | V | voltage | |
| 2 | 0102 | R | 2 | INT32(2+3) | A | current | forward and reverse(modbus) |
| 3 | 0104 | R | 2 | INT32(5+0) | W | active power | forward and reverse(modbus) |
| 4 | 0106 | R | 2 | INT32(5+0) | VA | apparent power | |
| 5 | 0108 | R | 2 | INT32(5+0) | var | reactive power | forward and reverse(modbus) |
| 6 | 010A | R | 1 | INT16(2+1) | Hz | frequency | |
| 7 | 010B | R | 1 | INT16(1+3) | PF | power factor | With CL indication, active power with sign of forward and reverse(modbus) |

2.: Energy parameters

| # | Modbus | | | | | Content | Remark |
|----|-------------------------|-----|-----------------|------------------|-------|--|---|
| | Modbus register address | R/W | Register length | Data Description | Unit | | |
| 1 | 010E | R | 2 | INT32(6+2) | kWh | Total forward active energy | |
| 2 | 0110 | R | 2 | INT32(6+2) | kWh | T1 total forward active energy | without tariffs version: T1= Total forward active energy |
| 3 | 0112 | R | 2 | INT32(6+2) | kWh | T2 total forward active energy | without tariffs version: T2=0 |
| 4 | 0114 | R | 2 | INT32(6+2) | kWh | T3 total forward active energy | without tariffs version: T3=0 |
| 5 | 0116 | R | 2 | INT32(6+2) | kWh | T4 total forward active energy | without tariffs version: T4=0 |
| 6 | 0118 | R | 2 | INT32(6+2) | kWh | Total reverse active energy | |
| 7 | 011A | R | 2 | INT32(6+2) | kWh | T1 total reverse active energy | without tariffs version: T1=Total reverse active energy |
| 8 | 011C | R | 2 | INT32(6+2) | kWh | T2 total reverse active energy | without tariffs version: T2=0 |
| 9 | 011E | R | 2 | INT32(6+2) | kWh | T3 total reverse active energy | without tariffs version: T3=0 |
| 10 | 0120 | R | 2 | INT32(6+2) | kWh | T4 total reverse active energy | without tariffs version: T4=0 |
| 11 | 0122 | R | 2 | INT32(6+2) | kWh | Total active energy | You can choose (forward), (reverse), (forward+reverse), (forward-reverse) by the synthetic code |
| 12 | 0124 | R | 2 | INT32(6+2) | kWh | T1 total active energy | without tariffs version: T1= Total active energy |
| 13 | 0126 | R | 2 | INT32(6+2) | kWh | T2 total active energy | without tariffs version: T2=0 |
| 14 | 0128 | R | 2 | INT32(6+2) | kWh | T3 total active energy | without tariffs version: T3=0 |
| 15 | 012A | R | 2 | INT32(6+2) | kWh | T4 total active energy | without tariffs version: T4=0 |
| 16 | 012C | R | 2 | INT32(6+2) | kvarh | Total forward reactive energy | |
| 17 | 012E | R | 2 | INT32(6+2) | kvarh | T1 total forward reactive energy | without tariffs version: T1=Total forward reactive energy |
| 18 | 0130 | R | 2 | INT32(6+2) | kvarh | T2 total forward reactive energy | without tariffs version: T2=0 |
| 19 | 0132 | R | 2 | INT32(6+2) | kvarh | T3 total forward reactive energy | without tariffs version: T3=0 |
| 20 | 0134 | R | 2 | INT32(6+2) | kvarh | T4 total forward reactive energy | without tariffs version: T4=0 |
| 21 | 0136 | R | 2 | INT32(6+2) | kvarh | Total reverse reactive energy | |
| 22 | 0138 | R | 2 | INT32(6+2) | kvarh | T1 total reverse reactive energy | without tariffs version: T1=total reverse reactive energy |
| 23 | 013A | R | 2 | INT32(6+2) | kvarh | T2 total reverse reactive energy | without tariffs version: T2=0 |
| 24 | 013C | R | 2 | INT32(6+2) | kvarh | T3 total reverse reactive energy | without tariffs version: T3=0 |
| 25 | 013E | R | 2 | INT32(6+2) | kvarh | T4 total reverse reactive energy | without tariffs version: T4=0 |
| 26 | 0140 | R | 2 | INT32(6+2) | kvarh | Total reactive energy | You can choose (forward), (reverse), (forward+reverse), (forward-reverse) by the synthetic code |
| 27 | 0142 | R | 2 | INT32(6+2) | kvarh | T1 total reactive energy | without tariffs version: T1=total reactive energy |
| 28 | 0144 | R | 2 | INT32(6+2) | kvarh | T2 total reactive energy | without tariffs version: T2=0 |
| 29 | 0146 | R | 2 | INT32(6+2) | kvarh | T3 total reactive energy | without tariffs version: T3=0 |
| 30 | 0148 | R | 2 | INT32(6+2) | kvarh | T4 total reactive energy | without tariffs version: T4=0 |
| 31 | 014A | R | 2 | INT32(6+2) | kvarh | Total reactive energy in the first quadrant | |
| 32 | 014C | R | 2 | INT32(6+2) | kvarh | T1 total reactive energy in the first quadrant | without tariffs version: T1=Total reactive energy in the first quadrant |
| 33 | 014E | R | 2 | INT32(6+2) | kvarh | T2 total reactive energy in the first quadrant | without tariffs version: T2=0 |
| 34 | 0150 | R | 2 | INT32(6+2) | kvarh | T3 total reactive energy in the first quadrant | without tariffs version: T3=0 |
| 35 | 0152 | R | 2 | INT32(6+2) | kvarh | T4 total reactive energy in the first quadrant | without tariffs version: T4=0 |

| | | | | | | | |
|----|------|---|---|------------|-------|---|--|
| 36 | 0154 | R | 2 | INT32(6+2) | kvarh | Total reactive energy in the second quadrant | |
| 37 | 0156 | R | 2 | INT32(6+2) | kvarh | T1 total reactive energy in the second quadrant | without tariffs version: T1=Total reactive energy in the second quadrant |
| 38 | 0158 | R | 2 | INT32(6+2) | kvarh | T2 total reactive energy in the second quadrant | without tariffs version: T2=0 |
| 39 | 015A | R | 2 | INT32(6+2) | kvarh | T3 total reactive energy in the second quadrant | without tariffs version: T3=0 |
| 40 | 015C | R | 2 | INT32(6+2) | kvarh | T4 total reactive energy in the second quadrant | without tariffs version: T4=0 |
| 41 | 015E | R | 2 | INT32(6+2) | kvarh | Total reactive energy in the third quadrant | |
| 42 | 0160 | R | 2 | INT32(6+2) | kvarh | T1 total reactive energy in the third quadrant | without tariffs version: T1=Total reactive energy in the third quadrant |
| 43 | 0162 | R | 2 | INT32(6+2) | kvarh | T2 total reactive energy in the third quadrant | without tariffs version: T2=0 |
| 44 | 0164 | R | 2 | INT32(6+2) | kvarh | T3 total reactive energy in the third quadrant | without tariffs version: T3=0 |
| 45 | 0166 | R | 2 | INT32(6+2) | kvarh | T4 total reactive energy in the third quadrant | without tariffs version: T4=0 |
| 46 | 0168 | R | 2 | INT32(6+2) | kvarh | Total reactive energy in the fourth quadrant | |
| 47 | 016A | R | 2 | INT32(6+2) | kvarh | T1 total reactive energy in the fourth quadrant | without tariffs version: T1=Total reactive energy in the fourth quadrant |
| 48 | 016C | R | 2 | INT32(6+2) | kvarh | T2 total reactive energy in the fourth quadrant | without tariffs version: T2=0 |
| 49 | 016E | R | 2 | INT32(6+2) | kvarh | T3 total reactive energy in the fourth quadrant | without tariffs version: T3=0 |
| 50 | 0170 | R | 2 | INT32(6+2) | kvarh | T4 total reactive energy in the fourth quadrant | without tariffs version: T4=0 |
| 51 | 0172 | R | 2 | INT32(6+2) | kWh | Resettable total active energy | |
| 52 | 0174 | R | 2 | INT32(6+2) | kvarh | Resettable total reactive energy | |
| 53 | 0176 | R | 2 | INT32(6+1) | W | forward active demand | |
| 54 | 0178 | R | 2 | INT32(6+1) | W | forward maximum active energy demand | |
| 55 | 017A | R | 2 | INT32(6+1) | W | reverse active demand | |
| 56 | 017C | R | 2 | INT32(6+1) | W | reverse maximum active energy demand | |
| 57 | 0180 | R | 2 | INT32(6+1) | var | forward reactive demand | |
| 58 | 0182 | R | 2 | INT32(6+1) | var | forward maximum reactive demand | |
| 59 | 0184 | R | 2 | INT32(6+1) | var | reverse reactive demand | |
| 60 | 0186 | R | 2 | INT32(6+1) | var | reverse maximum reactive demand | |

3.: Meter parameters

| # | Modbus | | | | | Content | |
|---|-------------------------|-----|-----------------|---|------|--------------------|--|
| | Modbus register address | R/W | Register length | Data Description | Unit | | |
| 1 | 1000 | 6 | R.W | 12-bit serial number, the same as DLT645 ID, it need to use 10h together, hexadecimal , 012345678910H serial number is 012345678910 | | Serial No. | |
| 2 | 1003 | 1 | R.W | 1-247 | | Modbus ID | |
| 3 | 1004 | 1 | R | 101 | | FW version | |
| 4 | 1005 | 1 | R | 101 | | HW version | |
| 5 | 1006 | 1 | R | XXXX | | FW Checksum | |
| 6 | 1007 | 4 | R.W | 00 year, month, day, week, hour, minute, second, need to use 10 control code to write at one time | | Time | Only available in WS100-19L3 with tariff version |
| 7 | 100B | 1 | R.W | 0-99 | | Cycle display time | |
| 8 | 100C | 1 | R.W | 1=300 2=600 3=1200 4=2400 5=4800 6=9600 7=19200 8=38400 9=115200 (Actually only 9600, 19200, 38400, 115200 are supported) | | 485 baud rate | |

| | | | | | | | |
|----|------|---|-----|--|--|--|--|
| 9 | 100D | 1 | R.W | 0=None 1=Odd 2=even | | 485 check digit | |
| 10 | 100E | 1 | R.W | 1=1bit 2=2bit | | 485 stop bit | |
| 11 | 100F | 1 | R.W | 1=total=forward 2=total=reverse 3=total=forward+reverse 4=total=forward-reverse | | combined code | |
| | 1010 | 1 | | 0=Interval 1=Slip | | demand mode | |
| 12 | 1011 | 1 | R.W | The unit minute can be set from 1-30, the default is 15 minutes | | demand cycle | |
| 17 | 1012 | 4 | R.W | In bitwise,0 means no display, and need use the 10 control code should to write at one time (8 bytes are used for three-phase, but only 4 bytes are used for single-phase) | | Cycle display content automatically | |
| | 1016 | 1 | R.W | Can be set to 0000-9999 | | password setting by the LCD button display | |
| 35 | 1018 | 2 | R.W | Meter running time (start calculation when the current is greater than the setting), write 0 clear to 0, need to use 10 control code to write at one time | | Meter running time | Only available in DEM1A102 with tariff version |
| 35 | 101A | 2 | R.W | Unit mA(startup current by default, maximum current's 1.2 times) 10 control code is used to write data at one time | | Timing current value | |
| 15 | 2002 | 1 | W | bit12-Resettable total active energy bit13-Resettable total reactive energy | | Clear energy | |
| 16 | 2003 | 1 | W | 0xA5XX bit0=forward active maximum demand bit1=reverse active maximum demand bit2=forward active maximum demand bit3=forward active maximum demand | | Clear max demand | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

4.: Tariffs parameters

| # | Modbus | | | | | Content | |
|----|-------------------------|-----|-----------------|--|------|---------------------|--|
| | Modbus register address | R/W | Register length | Data Description | Unit | | |
| 1 | 1700 | R.W | 12 | hhmmNN*8 Requires continuous write operations and Opcode is 10H | | Time period table 1 | Only available in WS100-19L3 with tariff version |
| 2 | 170C | R.W | 12 | | | Time period table 2 | |
| 3 | 1718 | R.W | 12 | | | Time period table 3 | |
| 4 | 1724 | R.W | 12 | | | Time period table 4 | |
| 5 | 1730 | R.W | 12 | | | Time period table 5 | |
| 6 | 173C | R.W | 12 | | | Time period table 6 | |
| 7 | 1748 | R.W | 12 | | | Time period table 7 | |
| 8 | 1754 | R.W | 12 | | | Time period table 8 | |
| 9 | 1760 | R.W | 12 | MMDDNN*8 | | Time zone table | |
| 10 | 176C | R.W | 21 | MMDDNN*14 | | Holidays table | |