| M5Stack Unit AC Measure I2C Protocol | | | | | | | | | | | | | | V1 (FW Version) 2023/3/24 | | | | | |
|--------------------------------------|------------------------|-------------------|-----------------------------|-----------------------------|--------------------------------|-----------------------------|---------------------|--------------------|--|--|--------|--------|----------------|------------------------------|---|---|---------|---------|---|
| REG MAP (Addr:0x42) | | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Α | В | С | D | E | F | note |
| String | Voltage(V) | 0x00 R | thousand's digit | hundred's digit | ten's digit | unit's digit | - | tenths | hundredth s | | | | | | | | | | |
| | Current(A) | 0x10 R | thousand's digit | hundred's digit | ten's digit | unit's digit | - | tenths | hundredth | | | | | | | | | | |
| | Active Power(W) | 0x20 R | thousand's digit | hundred's digit | ten's digit | unit's digit | - | tenths | hundredth s | | | | | | | | | | |
| | Apparent | 0x30 | thousand's | hundred's | ten's digit | unit's digit | | tenths | hundredth | | | | | | | | | | |
| | Power(VA) | R 0x40 | digit | digit | terrs digit | hundredth | | terrais | S | | | | | | | | | | |
| | Power Factor | R | unit's digit | | tenths | s | | | | ı | | | | | | | | | |
| | kW.h | 0x50 R | ten millions | millions | hundred thousand's digit | ten thousand's digit | thousand's digit | hundred's digit | ten's digit | unit's digit | | tenths | hundredth s | | | | | | |
| | Voltage(V) | 0x60 R | voltage-L | voltage-H | | | | | | | | | | | | | | | Voltage: Voltage = (voltage-L + voltage- H * 256) / 100 [1] |
| Value | Current(A) | 0x70 R | current-L | current-H | | | | | | | | | | | | | | | Current: Current = (Current-L + Current- H * 256) / 100 |
| | Active Power(W) | 0x80 R | active power- byte0 | active power- byte1 | active power byte2 | active power byte3 | | | | | | | | | | | | | Active Power: ActivePower = (ActivePower-L + ActivePower-H * 256) / 100 |
| | Apparent Power(VA) | 0x90 R | apparent power- byte0 | apparent power- byte1 | apparent power- byte2 | apparent power- byte3 | | | | | | | | | | | | | Apparent Power: ApparentPower = (Apparent Power-L + ApparentPower-H * 256) / 100 |
| | Power Factor | 0xA0 R | power factor | | | | | | | | | | | | | | | | Power Factor: power factor / 100 |
| | kW.h | 0xB0 R/W | kW.h- byte0 | kW.h- byte1 | kW.h- byte2 | kW.h- byte3 | | | | | | | | | | | | | kW.h: kW.h = (kW.h-byte0 + kW.h- byte1 * 256 + kW.h-byte2 * 65536 + kW.h-byte3 * 16777216) / 100 |
| | Voltage Coefficient | 0xC0 R/W | voltage coefficient | | | | | | | | | | | | | | | | Voltage Coefficient: voltage coefficient / 100 |
| ļ | Current Coefficient | 0xD0 R/W | current coefficient | | | | | | | | | | | | | | | | Current Coefficient: current coefficient / 100 |
| | Save Coefficient | 0xE0 W | save | | | | | | | | | | | | | | | | Save: set a value > 1, will save voltage and current coefficient |
| | Data Ready | OxFO R Data Ready | | | | | | | | Data Ready: Data Ready=1, data ready; Data Ready = 0, data not ready | | | | | | | | | |
| | Jump Bootloader | | | | | | | | Jump Bootloader: Write 1 jump to bootloader | | | | | | | | | | |
| | Firmware Version | 0xF0 R | | | | | | | | | | | | | | | Version | | Version: firmware version number |
| Ī | I2C Address | 0xF0 R/W | | | | | | | | | | | | | | | | Address | Address: I2C Address |
| [1] For exa | mple, the actual v | oltage i | s 100.55V, a | nd the obta | ined data is | 100.55*100= | 10055, Ten | perature-L | = 0x47, Ter | mperature-H | = 0x27 | | | | | | | | |