

**Group 0** - device state

| Nr | Modbus Adress | Precision | Name                   | Unit | Description                      |
|----|---------------|-----------|------------------------|------|----------------------------------|
| 1  | 40001         | 1         | Produced energy [kWh]  | kWh  | Total produced energy            |
| 2  | 40002         | 1         | Run time [h]           | h    | Total run tim                    |
| 3  | 40003         | 1         | Grid power L1 [W]      | W    | Active power on phase L1         |
| 4  | 40004         | 1         | Grid power L2 [W]      | W    | Active power on phase L2         |
| 5  | 40005         | 1         | Grid power L3 [W]      | W    | Active power on phase L3         |
| 6  | 40006         | 0,01      | Grid freq [Hz]         | Hz   | Grid frequency                   |
| 9  | 40009         | 1         | Grid volt. L1 [V]      | V    | Grid voltage on phase L1-N       |
| 10 | 40010         | 1         | Grid volt. L2 [V]      | V    | Grid voltage on phase L2-N       |
| 11 | 40011         | 1         | Grid volt. L3 [V]      | V    | Grid voltage on phase L3-N       |
| 12 | 40012         | 0,1       | Grid curr. L1 [A]      | A    | Grid current in phase L1         |
| 13 | 40013         | 0,1       | Grid curr. L2 [A]      | A    | Grid current in phase L2         |
| 14 | 40014         | 0,1       | Grid curr. L3 [A]      | A    | Grid current in phase L3         |
| 15 | 40015         | 1         | Grid reactive L1 [Var] | Var  | Reactive power on phase L1       |
| 16 | 40016         | 1         | Grid reactive L2 [Var] | Var  | Reactive power on phase L2       |
| 17 | 40017         | 1         | Grid reactive L3 [Var] | Var  | Reactive power on phase L3       |
| 18 | 40018         | 1         | Total power [W]        | W    | Total active power               |
| 19 | 40019         | 1         | Total reactive [Var]   | Var  | Total reactive power             |
| 20 | 40020         | 1         | Input 1 power [W]      | W    | Power on input 1                 |
| 21 | 40021         | 1         | Input 1 volt [V]       | V    | Voltage on input 1               |
| 22 | 40022         | 0,1       | Input 1 curr [A]       | A    | Current on input 1               |
| 23 | 40023         | 1         | Input 2 power [W]      | W    | Power on input 2                 |
| 24 | 40024         | 1         | Input 2 volt [V]       | V    | Voltage on input 2               |
| 25 | 40025         | 0,1       | Input 2 curr [A]       | A    | Current on input 2               |
| 26 | 40026         | 1         | Input 3 power [W]      | W    | Power on input 3                 |
| 27 | 40027         | 1         | Input 3 volt [V]       | V    | Voltage on input 3               |
| 28 | 40028         | 0,1       | Input 3 curr [A]       | A    | Current on input 3               |
| 30 | 40030         | 0,1       | Turbine freq [Hz]      | Hz   | Frequence of the turbine voltage |
| 31 | 40031         | 0,1       | Wind speed [m/s]       | m/s  | Wind speed                       |
| 32 | 40032         | 1         | Resistance [kΩ]        | kΩ   | Insulation resistance            |
| 33 | 40033         | 0,1       | Leakege current [mA]   | mA   | Leakege current                  |
| 34 | 40034         | 1         | Digital output         |      | Digital output                   |
| 35 | 40035         | 1         | Digital input          |      | Digital input                    |

|    |       |     |                        |    |   |
|----|-------|-----|------------------------|----|---|
| 40 | 40040 | 0,1 | Charger volt. [V]      | V  | Battery voltage                               |
| 41 | 40041 | 0,1 | Charger curr. [A]      | A  | Battery current                               |
| 42 | 40042 | 1   | Charger temp. [°C]     | °C | Battery temperature                           |
| 43 | 40043 | 1   | Charger t. mod [°C]    | °C | Charger temperature                           |
| 44 | 40044 | 1   | Charger fault          |    | Charger vault                                 |
| 45 | 40045 | 1   | Charger UDC [V]        | V  | Charger DC link voltage                       |
| 46 | 40046 | 1   | SoC                    | %  | State of charge (only for batteries with BMS) |
| 47 | 40047 | 1   | Char. Power            |    |   |
| 48 | 40048 |     | chargerEnergyToGrid    |    |   |
| 49 | 40049 |     | chargerEnergyToBattery |    |   |
| 50 | 40050 | 1   | UDC [V]                | V  | Inverter DC link voltage                      |
| 51 | 40051 | 1   | UDC 1 [V]              | V  | Inverter 1st half DC link voltage             |
| 52 | 40052 | 1   | UDC 2 [V]              | V  | Inverter 2nd half DC link voltage             |
| 53 | 40053 | 1   | Radiator temp. [°C]    | °C | Temperature of heatsink                       |
| 54 | 40054 | 1   | Module temp. [°C]      | °C | Module temperature                            |
| 60 | 40060 | 1   | Status                 |    | Inverter state<br>0 : stop, 1 : work          |
| 61 | 40061 | 1   | Version ctr1           |    | Keyboard software version                     |
| 62 | 40062 | 1   | Version output         |    | Control software version                      |
| 63 | 40063 | 1   | Version charger        |    | Charger software version                      |
| 64 | 40064 | 1   | Revision               |    |   |
| 70 | 40070 | 1   | Event 1                |    | Most recent fault code                        |
| 71 | 40071 | 1   | Event 2                |    | Previous fault code                           |
| 72 | 40072 | 1   | Event 3                |    | Previous fault code                           |
| 73 | 40073 | 1   | Event 4                |    | Previous fault code                           |
| 74 | 40074 | 1   | Event 5                |    | Previous fault code                           |
| 75 | 40075 | 1   | Event 6                |    | Previous fault code                           |
| 76 | 40076 | 1   | Event 7                |    | Previous fault code                           |
| 77 | 40077 | 1   | Event 8                |    | Previous fault code                           |
| 78 | 40078 | 1   | Event 9                |    | Previous fault code                           |
| 79 | 40079 | 1   | Event 10               |    | Kod najstarszego zdarzenia                    |
| 80 | 40080 | 1   | Eth. IP 1              |    | IP Adress                                     |
| 81 | 40081 | 1   | Eth. IP 2              |    | IP Adress                                     |
| 82 | 40082 | 1   | Eth. IP 3              |    | IP Adress                                     |
| 83 | 40083 | 1   | Eth. IP 4              |    | IP Adress                                     |

|    |       |     |             |    |  |
|----|-------|-----|-------------|----|--|
| 84 | 40084 | 1   | Eth. MASK 1 |    | Subnet mask                                  |
| 85 | 40085 | 1   | Eth. MASK 2 |    | Subnet mask                                  |
| 86 | 40086 | 1   | Eth. MASK 3 |    | Subnet mask                                  |
| 87 | 40087 | 1   | Eth. MASK 4 |    | Subnet mask                                  |
| 88 | 40088 | 1   | Eth. GW 1   |    | Gateway                                      |
| 89 | 40089 | 1   | Eth. GW 2   |    | Gateway                                      |
| 90 | 40090 | 1   | Eth. GW 3   |    | Gateway                                      |
| 91 | 40091 | 1   | Eth. GW 4   |    | Gateway                                      |
| 92 | 40092 | 1   | Eth. State  |    | Ethernate connection state                   |
| 97 | 40097 | 0,1 | EG L1       |    | Power on phase L1, measure form Energy Guard |
| 98 | 40098 | 0,1 | EG L2       | kW | Power on phase L2, measure form Energy Guard |
| 99 | 40099 | 0,1 | EG L3       | kW | Power on phase L3, measure form Energy Guard |
|    |       |     |             | kW |  |