

| Register Name | Description | Register Type | R/W | Default | Modbus Address |
|------------------------------|--|-------------------|-----|---|----------------|
| Machine Id | Machine ID | unsigned short | R | 15 or 25 | 4001 |
| Hardware/Firmware Version | Hardware (MSB) and Firmware (LSB) Revision | unsigned short | R | | 40002 |
| Address | Modbus address | unsigned short | R/W | 1 | 40003 |
| Delay | Machine answer delay (in characters) | unsigned short | R/W | 1 | 40004 |
| Baudrate | 0 → 1200 1 → 2400 2 → 4800 3 → 9600 4 → 19200 5 → 38400 6 → 57600 7 → 115200 | unsigned short | R/W | 3 | 40005 |
| Parity | Not used (always none) | unsigned short | R/W | 0 | 40006 |
| Flag Measurement | Bit 0: Ah Saving 0 → Ah disabled 1 → Ah enabled Bit 1..2: Measurement Channel 0 → Input 1A/5A 1 → Input 20 mA/100 mA 2 → Input 1 V 3 → Input 10 V Bit 3: RTD measurement 0 → 2 wire RTD 1 → 3 wire RTD Bit 4: Output Type 0 → Voltage 0-10 V 1 → Current 0-20 mA Bit 5..6: Output measurement retransmitted 0 → IRMS 1 → IAC 2 → IDC 3 → Temperature Bit 7: FFT representation 0 → Absolute 1 → Relative to the I 1 value Bit 8: THD calculation 0 → Only AC components 1 → Including DC components Bit 9..10: Temperature sensor 0 → PT100 1 → NTC 10 KΩ 2 → NTC 100 KΩ 3 → NTC Steinhart-Hart Bit 11..12: Measurement type 0 → Float 1 → Float Swapped 2 → Hundredth (Float * 100) 3 → Hundredth swapped (Float * 100 SW) Bit 13: Integrator condition 0 → Integrator disabled 1 → Integrator enabled (Rogowski input) Bit 14: Output switch initial condition 0 → Closed initial condition | unsigned short | R/W | 16408 (Ah Disabled, Input 1a 5a, Rtd 3 W, Current 0..20mA, I Rms Out, FFT Representation Absolute, Only Ac Components, Pt100, Float Type, Integrator Disabled, Open Init Cond) | 40007 |
| Led Settings | Set the yellow led (COMM LED) according to the corresponding bit set: Bit: 0 → Fail Eeprom 1 → Input Under-range 2 → Input Over-range 3 → Output Under-range 4 → Output Over-range 5 → RTD Out of the range 6 → RTD Third Wire error | unsigned short | R/W | RTD Third Wire error | 40008 |
| Transducer Ratio | If Input 1A/5A, 20mA/100 mA → Current transformer ratio M/N (Ex: TA ratio = 600:5 → transducer ratio = 120; TA ratio = 1000:1 → transducer ratio = 1000) If Input 1V, 10V → 1/Sensitivity [V/A] (Ex: Sensitivity = 100mV/1KA → transducer ratio = 10000; Sensitivity = 4V/400A → transducer ratio = 100) | float (LSW first) | R/W | 1 | 40009 |
| Minimum Current Ripple | Minimum threshold under which the instrument reads 0 independent from the input value | float (LSW first) | R/W | 0 | 40011 |
| Dc Filter | Number of tenth seconds for I RMS value in DC | unsigned short | R/W | 10 | 40013 |
| Ac Filter | Number of zero crossings for I RMS value in AC | unsigned short | R/W | 50 | 40014 |
| Seconds For Mean Rms | Register in seconds (0..30) for RMS average | unsigned short | R/W | 0 | 40015 |
| Seconds For Max Rms | Seconds 1..30 for MAX RMS value. If the register is 0, then the absolute MAX RMS is given | unsigned short | R/W | 0 | 40016 |
| Seconds For Min Rms | Seconds 1..30 for min RMS value. If the register is 0, then the absolute min RMS is given | unsigned short | R/W | 0 | 40017 |
| Seconds For Mean Dc | Register in seconds (0..30) for DC average | unsigned short | R/W | 0 | 40018 |
| Seconds For Max Dc | Seconds 1..30 for MAX DC value. If the register is 0, then the absolute MAX DC is given | unsigned short | R/W | 0 | 40019 |
| Seconds For Min Dc | Seconds 1..30 for min DC value. If the register is 0, then the absolute min DC is given | unsigned short | R/W | 0 | 40020 |
| Seconds For Mean Ac | Register in seconds (0..30) for AC average | unsigned short | R/W | 0 | 40021 |
| Seconds For Max Ac | Seconds 1..30 for MAX AC value. If the register is 0, then the absolute MAX AC is given | unsigned short | R/W | 0 | 40022 |
| Seconds For Min Ac | Seconds 1..30 for min AC value. If the register is 0, then the absolute min AC is given | unsigned short | R/W | 0 | 40023 |
| Alarm Register Start Address | Float value Starting address for alarm (40149 I RMS, 40151 I DC, 40153 I AC, ecc) | unsigned short | R/W | 40149 | 40024 |
| I Start | Current (in A)/temperature (in °C) (see Flag Measurement) which corresponds to Out start | float (LSW first) | R/W | 0 | 40025 |
| Out Start | Output value (in mV o in uA) of the chosen output corresponding to I start | unsigned short | R/W | 4000 | 40027 |
| I Stop | Current (in A)/temperature (in °C) (see Flag Measurement) which corresponds to Out stop | float (LSW first) | R/W | 5 | 40029 |
| Out Stop | Output value (in mV o in uA) of the chosen output corresponding to I stop | unsigned short | R/W | 20000 | 40031 |
| Steinhart Hart A | Coeff Steinhart-Hart A | float (LSW first) | R/W | 0 | 40033 |
| Steinhart Hart B | Coeff Steinhart-Hart B | float (LSW first) | R/W | 0 | 40035 |
| Steinhart Hart C | Coeff Steinhart-Hart C | float (LSW first) | R/W | 0 | 40037 |
| Alarm Trip Value | Alarm Threshold | float (LSW first) | R/W | 0 | 40039 |

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|--------------------------------|---|-------------------|-----|---|-------|
| Alarm Hysteresis | Alarm Hysteresis | float (LSW first) | R/W | 1 | 40041 |
| | bit 0: flash settings error; Bit 1: flash calibration error; bit 2: Current Over Range; bit 3: Current Under Range; Bit 4: don't care; Bit 5: RTD Open or broken; bit 6: Current Zero crossing detecting; Bit 7: Switch open; Bit 8: RTD third wire error (Resistance > 20 Ω); Bit 9: RTD out of the range (-200 °C .. + 600 °C) bit 10: Ah storing error; Bit 11: Analog Output over range; bit 12: don't care; Bit 13: Alarm detection; bit 14: Analog Output under range; Bit 15: don't care; | | R | | |
| Status | | unsigned short | | | 40147 |
| V I Out | Voltage or current output (in mV o mA) | signed short | R | | 40148 |
| I Rms | RMS Value [A] | float (LSW first) | R | | 40149 |
| I Dc | DC value [A] | float (LSW first) | R | | 40151 |
| I Ac | AC value [A] | float (LSW first) | R | | 40153 |
| Frequency | Frequency [Hz] | float (LSW first) | R | | 40155 |
| Crest Factor | Crest Factor | float (LSW first) | R | | 40157 |
| Thd | Total Harmonic Distortion | float (LSW first) | R | | 40159 |
| I 0 Rms | DC Harmonic | float (LSW first) | R | | 40161 |
| I 1 Rms | 1st Harmonic | float (LSW first) | R | | 40163 |
| I 2 Rms | 2nd Harmonic | float (LSW first) | R | | 40165 |
| I 3 Rms | 3rd Harmonic | float (LSW first) | R | | 40167 |
| I 4 Rms | 4th Harmonic | float (LSW first) | R | | 40169 |
| I 5 Rms | 5th Harmonic | float (LSW first) | R | | 40171 |
| I 6 Rms | 6th Harmonic | float (LSW first) | R | | 40173 |
| I 7 Rms | 7th Harmonic | float (LSW first) | R | | 40175 |
| I 8 Rms | 8th Harmonic | float (LSW first) | R | | 40177 |
| I 9 Rms | 9th Harmonic | float (LSW first) | R | | 40179 |
| I 10 Rms | 10th Harmonic | float (LSW first) | R | | 40181 |
| I 11 Rms | 11th Harmonic | float (LSW first) | R | | 40183 |
| I 12 Rms | 12th Harmonic | float (LSW first) | R | | 40185 |
| I 13 Rms | 13th Harmonic | float (LSW first) | R | | 40187 |
| I 14 Rms | 14th Harmonic | float (LSW first) | R | | 40189 |
| I 15 Rms | 15th Harmonic | float (LSW first) | R | | 40191 |
| I 16 Rms | 16th Harmonic | float (LSW first) | R | | 40193 |
| I 17 Rms | 17th Harmonic | float (LSW first) | R | | 40195 |
| I 18 Rms | 18th Harmonic | float (LSW first) | R | | 40197 |
| I 19 Rms | 19th Harmonic | float (LSW first) | R | | 40199 |
| I 20 Rms | 20th Harmonic | float (LSW first) | R | | 40201 |
| I 21 Rms | 21st Harmonic | float (LSW first) | R | | 40203 |
| I 22 Rms | 22nd Harmonic | float (LSW first) | R | | 40205 |
| I 23 Rms | 23rd Harmonic | float (LSW first) | R | | 40207 |
| I 24 Rms | 24th Harmonic | float (LSW first) | R | | 40209 |
| I 25 Rms | 25th Harmonic | float (LSW first) | R | | 40211 |
| I 26 Rms | 26th Harmonic | float (LSW first) | R | | 40213 |
| I 27 Rms | 27th Harmonic | float (LSW first) | R | | 40215 |
| I 28 Rms | 28th Harmonic | float (LSW first) | R | | 40217 |
| I 29 Rms | 29th Harmonic | float (LSW first) | R | | 40219 |
| I 30 Rms | 30th Harmonic | float (LSW first) | R | | 40221 |
| I 31 Rms | 31st Harmonic | float (LSW first) | R | | 40223 |
| I 32 Rms | 32nd Harmonic | float (LSW first) | R | | 40225 |
| I 33 Rms | 33rd Harmonic | float (LSW first) | R | | 40227 |
| I 34 Rms | 34th Harmonic | float (LSW first) | R | | 40229 |
| I 35 Rms | 35th Harmonic | float (LSW first) | R | | 40231 |
| I 36 Rms | 36th Harmonic | float (LSW first) | R | | 40233 |
| I 37 Rms | 37th Harmonic | float (LSW first) | R | | 40235 |
| I 38 Rms | 38th Harmonic | float (LSW first) | R | | 40237 |
| I 39 Rms | 39th Harmonic | float (LSW first) | R | | 40239 |
| I 40 Rms | 40th Harmonic | float (LSW first) | R | | 40241 |
| I 41 Rms | 41st Harmonic | float (LSW first) | R | | 40243 |
| I 42 Rms | 42nd Harmonic | float (LSW first) | R | | 40245 |
| I 43 Rms | 43rd Harmonic | float (LSW first) | R | | 40247 |
| I 44 Rms | 44th Harmonic | float (LSW first) | R | | 40249 |
| I 45 Rms | 45th Harmonic | float (LSW first) | R | | 40251 |
| I 46 Rms | 46th Harmonic | float (LSW first) | R | | 40253 |
| I 47 Rms | 47th Harmonic | float (LSW first) | R | | 40255 |
| I 48 Rms | 48th Harmonic | float (LSW first) | R | | 40257 |
| I 49 Rms | 49th Harmonic | float (LSW first) | R | | 40259 |
| I 50 Rms | 50th Harmonic | float (LSW first) | R | | 40261 |
| I 51 Rms | 51st Harmonic | float (LSW first) | R | | 40263 |
| I 52 Rms | 52nd Harmonic | float (LSW first) | R | | 40265 |
| I 53 Rms | 53rd Harmonic | float (LSW first) | R | | 40267 |
| I 54 Rms | 54th Harmonic | float (LSW first) | R | | 40269 |
| I 55 Rms | 55th Harmonic | float (LSW first) | R | | 40271 |
| I 56 Rms | 56th Harmonic | float (LSW first) | R | | 40273 |
| I 57 Rms | 57th Harmonic | float (LSW first) | R | | 40275 |
| I 58 Rms | 58th Harmonic | float (LSW first) | R | | 40277 |
| I 59 Rms | 59th Harmonic | float (LSW first) | R | | 40279 |
| I 60 Rms | 60th Harmonic | float (LSW first) | R | | 40281 |
| I 61 Rms | 61st Harmonic | float (LSW first) | R | | 40283 |
| I 62 Rms | 62nd Harmonic | float (LSW first) | R | | 40285 |
| I 63 Rms | 63rd Harmonic | float (LSW first) | R | | 40287 |
| Internal Temperature | Internal Temperature [°C] | float (LSW first) | R | | 40289 |
| Rtd Temperature | RTD Temperature [°C] | float (LSW first) | R | | 40291 |
| Rtd Resistance | RTD Resistance [Ω] | float (LSW first) | R | | 40293 |
| Rtd 3rd Wire Resistance | Third wire Resistance [Ω] | float (LSW first) | R | | 40295 |
| Ntc Resistance | NTC parallel resistance [Ω] | float (LSW first) | R | | 40297 |
| I Rms Mean | RMS average [A] over "seconds for mean RMS" | float (LSW first) | R | | 40299 |
| I Rms Max | MAX RMS [A] over last "seconds for MAX RMS" | float (LSW first) | R | | 40301 |
| I Rms Min | Min RMS [A] over last "seconds for min RMS" | float (LSW first) | R | | 40303 |
| I Dc Mean | DC average [A] over "seconds for mean DC" | float (LSW first) | R | | 40305 |
| I Dc Max | MAX DC [A] over last "seconds for MAX DC" | float (LSW first) | R | | 40307 |
| I Dc Min | min DC [A] over last "seconds for min DC" | float (LSW first) | R | | 40309 |
| I Ac Mean | AC average [A] over "seconds for mean AC" | float (LSW first) | R | | 40311 |
| I Ac Max | MAX AC [A] over last "seconds for MAX AC" | float (LSW first) | R | | 40313 |

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|-------------------------|--|-------------------|-----|--|--------------|
| I Ac Min | min AC [A] over last "seconds for min AC" | float (LSW first) | R | | 40315 |
| Ah I Rms | Overall Ah for RMS value. Resettable via Command. Optionally storable in flash | float (LSW first) | R | | 40317 |
| Ah I Dc | Overall Ah for DC value. Resettable via Command. Optionally storable in flash | float (LSW first) | R | | 40319 |
| Ah I Ac | Overall Ah for AC value. Resettable via Command. Optionally storable in flash | float (LSW first) | R | | 40321 |
| Ah Storage Count | Number of Ah flash savings (every 20 seconds) | unsigned long | R | | 40323 |
| I Peak | Current peak | float (LSW first) | R/W | | 40325 |
| | Flash settings save command = 0xC1C0; Reset command = 0xC1A0; Load Ah command = 0xBABA (Ah to load must be written in Command_aux); Load Positive Ah command = 0xBABB (positive Ah to load must be written in Command_aux); Load Negative Ah command = 0xBABC (negative Ah to load must be written in Command_aux); Close Switch command = 0xDAAA; Open Switch command = 0xDAAB; | | R/W | | |
| Command | Open Switch command = 0xDAAB; | unsigned short | | | 40328 |
| Command Aux | Auxiliary parameter command | float (LSW first) | R/W | | 40329 |