














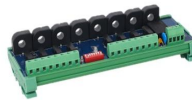
DC Universal Signal Acquisition Module Catalog




| Product Name | Product Model | Product Feature | Product Picture |
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| 12-Channel AC/DC Universal Data Acquisition Module | ZH-41121 (12-Channel AC/DC Voltage) ZH-41122 (12-Channel AC/DC Current) ZH-41123 (12-Channel AC/DC Mixed Inputs) | <ul style="list-style-type: none"> • Accuracy: Class 0.2% • Resolution: 0.01% of full scale • Current ranges: 1mA to 10A AC/DC • Voltage ranges: 75mV to 700V AC/DC • Frequency response: 0Hz–1000Hz • 12 fully isolated input channels • True RMS and average value measurement • RS485, Ethernet, Modbus RTU/TCP, optional CAN bus • Adjustable sampling rates from 20ms to 800ms • Fastest 20ms synchronized acquisition for all channels • Auxiliary power supply: 9–55VDC |  |
| 12-Channel Through-Hole Current Acquisition Module | ZH-44123A (1 Voltage + 12 DC Current Inputs) ZH-41123A (1 Voltage + 12 AC/DC Current Inputs) | <ul style="list-style-type: none"> • Accuracy: Class 0.5% • Current ranges: 5A, 10A, 20A, 30A, 40A, 50A, 60A • Maximum DC current up to 85A • Voltage ranges: 10V, 60V, 100V, 300V, 400V, 600V • Through-hole diameter: 8.5mm • 12 current inputs + 1 voltage input • Fully isolated channels • RS485 Modbus RTU or Ethernet TCP communication • Adjustable sampling rate, fastest 20ms synchronization • Configurable odd/even parity • Baud rate up to 115200bps • Power supply: 10–30VDC |  |

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| <p>Single-Phase DC High Voltage & High Current Power Monitoring Module</p> | <p>ZH-4223A-1 (Through-Hole, RS485) ZH-4223-1 (Terminal Type, RS485) ZH-4223A-3 (Through-Hole, Ethernet) ZH-4223-3 (Terminal Type, Ethernet)</p> | <ul style="list-style-type: none"> • Voltage ranges up to 1500VDC • Current ranges from 20mA to 1000A • Optional AC/DC version above 30A • Through-hole aperture: 20mm • Measures voltage, current, power and energy • Accuracy: Class 0.5% • Wide power supply: 9–30VDC or 9–60VDC • Fast update rate: 100ms (20ms optional) • RS485 or Ethernet (Modbus RTU/TCP) • Relay alarm outputs • High/Low limit and window alarm functions |  |
| <p>24-Channel Through-Hole Hall Current Monitoring Module</p> | <p>ZH-44242A (24 DC Current Inputs) ZH-41242A (24 AC/DC Current Inputs)</p> | <ul style="list-style-type: none"> • Accuracy: Class 0.5% • Current ranges: 5A–60A AC/DC • Voltage ranges: 10V–400V AC/DC • Through-hole diameter: 8.5mm • 24 isolated current channels • RS485 Modbus RTU communication • Fastest 20ms synchronized acquisition • Configurable parity settings • Baud rate up to 115200bps |  |
| <p>External Sensor 6-Channel Current Acquisition Module</p> | <p>ZH-44062WT (6 DC Current Inputs) ZH-41062WT (6 AC/DC Current Inputs)</p> | <ul style="list-style-type: none"> • Closed-loop sensor accuracy better than 0.5% FS • Open-loop sensor accuracy 1% FS • Current ranges: 5A–200A AC/DC • Supports various external current sensors • Frequency response: 0Hz–1kHz • Sensor apertures: 8mm, 16mm, 20×10mm • Includes 6 current sensors per module • Fully isolated channels • RS485 or Ethernet (Modbus RTU/TCP) • Adjustable acquisition speed from 20ms to 1000ms • Baud rate up to 115200bps |  |

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| <p>6-Channel AC/DC Current Monitoring Module</p> | <p>ZH-44062A (6 DC Current Inputs) ZH-41062A (6 AC/DC Current Inputs)</p> | <ul style="list-style-type: none"> • Accuracy: Class 0.5% • Current ranges: 5A–60A AC/DC • Maximum DC current up to 85A • Frequency response: 0Hz–1kHz • Through-hole diameter: 8.5mm • 6 isolated current inputs • RS485 or Ethernet communication • Modbus RTU/TCP support • Adjustable acquisition speed from 20ms to 1000ms • Baud rate up to 115200bps |  |
| <p>Single-Channel DC Voltage / Current / Power Meter</p> | <p>ZH-4223A (Through-Hole Power Type) ZH-4223 (Terminal Power Type) ZH-4211 (Voltage Type) ZH-4212A (Through-Hole Current Type) ZH-4212 (Terminal Current Type)</p> | <ul style="list-style-type: none"> • Measures voltage, current, power and energy • Voltage ranges up to 500VDC • Current ranges up to 100A • Accuracy: Class 0.2% (terminal type) • Through-hole version: Class 0.5% • Wide power supply: 9–30VDC or 9–60VDC • Fast update rate: 100ms (20ms optional) • RS485 Modbus RTU communication |  |
| <p>8-Channel Fully Isolated High-Speed Acquisition Module</p> | <p>ZH-44081 / ZH-44082 / ZH-44083 / ZH-44084 ZH-41081 / ZH-41082 / ZH-41083 / ZH-41084</p> | <ul style="list-style-type: none"> • 8 fully isolated channels • Measures voltage, current, power and energy • Independent 24-bit ADC per channel • Accuracy: Class 0.2% • Linearity: 0.1% • Fastest synchronized acquisition: 20ms • Bipolar and unipolar measurement modes • Adjustable acquisition speed from 20ms to 1000ms • Wide supply voltage: 9–30VDC • Voltage ranges up to 500V • Current ranges up to 10A |  |

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| <p>24-Channel Fully Isolated AC/DC Universal Acquisition Module</p> | <p>ZH-41241 / ZH-44241 (Voltage) ZH-41242 / ZH-44242 (Current) ZH-41243 / ZH-44243 (Mixed Inputs)</p> | <ul style="list-style-type: none"> • Accuracy: 0.3% FS • AC/DC voltage and current measurement • Up to 24 configurable channels • Flexible voltage/current channel combinations • Current ranges up to 10A • Voltage ranges up to 400V • RS485 Modbus RTU communication • Optional Ethernet interface • Fastest synchronized acquisition: 200ms • Baud rate up to 115200bps |  |
| <p>3-Channel Fully Isolated DC Voltage & Current Acquisition Module</p> | <p>ZH-44063A (3-Channel DC Voltage & Current) ZH-44031A (3-Channel DC Current)</p> | <ul style="list-style-type: none"> • 3 fully isolated channels for voltage, current and power measurement • High-speed acquisition with 6 independent ADCs, minimum 20ms sampling cycle • Voltage accuracy: 0.2%; Current accuracy: 0.5% • Adjustable sampling rates: 20ms / 40ms / 60ms / 80ms / 100ms / 400ms / 1000ms • Supports unipolar and bipolar measurement modes • Wide power supply: 9–30VDC • Voltage ranges: 10V / 60V / 100V / 300V / 500V • Current ranges: 5A / 15A / 20A / 25A / 40A / 50A / 60A AC/DC |  |
| <p>24-Channel Fully Isolated DC Acquisition Module</p> | <p>ZH-44241G (24 Voltage Inputs) ZH-44242G (24 Current Inputs) ZH-44243G (24 Voltage & Current Inputs)</p> | <ul style="list-style-type: none"> • 24 fully isolated channels for DC voltage and current measurement • 16 independent ADCs, minimum 20ms acquisition cycle • Accuracy better than Class 0.1 • 24-bit ADC with 0.1% linearity accuracy • Adjustable sampling rates from 20ms to 400ms • Supports unipolar and bipolar measurement • Wide supply voltage: 9–30VDC • Voltage ranges: 75mV to 700VDC • Current ranges: 500uA to 10ADC |  |

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| <p>Split-Core DC Current Monitoring Transmitter</p> | <p>ZH-4223A-14G4 (DC Power Type) ZH-4212A-14G4 (DC Current Type)</p> | <ul style="list-style-type: none"> • 31mm split-core sensor with self-locking mechanism • Voltage range: 0–500VDC • Current range: 10A–1000ADC • RS485 Modbus RTU communication • Wide supply voltage: 9–30VDC or 9–55VDC • Measures voltage, current, power and energy consumption |  |
| <p>4-Channel High-Speed Isolated DC Voltage & Current Acquisition Module</p> | <p>ZH-44041 (4 Voltage Inputs) ZH-44042 (4 Current Inputs) ZH-44044 (4 Power Inputs) ZH-41044 (AC/DC Universal Version)</p> | <ul style="list-style-type: none"> • 4 fully isolated channels for voltage, current, power and energy monitoring • Supports AC/DC universal measurement • High-speed sampling with minimum 20ms refresh rate • Class 0.2 accuracy with 24-bit ADC • Adjustable acquisition rates from 20ms to 1000ms • Supports unipolar and bipolar measurement • Wide supply voltage: 9–30VDC • Voltage ranges up to 1000V • Current ranges from 100uA to 10A |  |
| <p>8 Voltage + 8 Current Fully Isolated AC/DC Acquisition Module</p> | <p>ZH-44084A (8 Voltage + 8 Current DC Inputs) ZH-41084A (8 Voltage + 8 Current AC/DC Inputs)</p> | <ul style="list-style-type: none"> • Class 0.5 accuracy • Current ranges: 5A to 60A AC/DC • Voltage ranges: 10V / 60V / 100V / 300V / 400V • 8.5mm through-hole current sensor • 8 voltage inputs + 8 current inputs • Fully isolated channels • RS485 Modbus RTU communication • Minimum 20ms synchronization cycle • Baud rate up to 115200bps |  |

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| <p>16-Channel High Accuracy DC Acquisition Module</p> | <p>ZH-44161 (16 Voltage Inputs) ZH-44162 (16 Current Inputs) ZH-44163 (16 Voltage & Current Inputs)</p> | <ul style="list-style-type: none"> • 16 fully isolated channels • High-speed acquisition with minimum 50ms cycle • Accuracy better than Class 0.1 • 24-bit ADC architecture • Adjustable speeds: 12ms to 400ms • Supports unipolar and bipolar measurement • Wide power supply: 9–30VDC • Voltage ranges up to 1000VDC • Current ranges from 500uA to 10A • RS485 or Ethernet communication optional |  |
| <p>12-Channel Fully Isolated DC Acquisition Module</p> | <p>ZH-44121 (12 Voltage Inputs) ZH-44122 (12 Current Inputs) ZH-44123 (12 Voltage & Current Inputs)</p> | <ul style="list-style-type: none"> • 12 fully isolated high-speed channels • Strong anti-interference capability • Minimum acquisition cycle: 20ms • Accuracy better than Class 0.2 • Resolution up to 0.01% FS • Adjustable refresh rates from 20ms to 400ms • Supports unipolar and bipolar measurement • Wide supply voltage: 9–30VDC • Voltage ranges up to 600VDC • Current ranges from 1mA to 10ADC |  |
| <p>10/20-Channel Hall-Effect Through-Hole Current Acquisition Module</p> | <p>ZH-44102A (10 Current Inputs) ZH-44202A (20 Current Inputs) ZH-44103A (1 Voltage+10 Current Inputs) ZH-44203A (1 Voltage+20 Current Inputs)</p> | <ul style="list-style-type: none"> • Class 0.5% FS accuracy • Current ranges: 5A / 10A / 20A / 30A / 40A AC/DC • Voltage ranges: 10V / 60V / 100V / 300V / 400V AC/DC • 8.5mm through-hole aperture • Supports 1 voltage input + 20 current inputs • RS485 Modbus RTU communication • Adjustable sampling speed • Minimum 20ms synchronization cycle • Baud rate up to 115200bps |  |