



HIGHLIGHTS

DC4CH smart DC energy meter, with 1 to 4 channels' DC power metering function, uses advanced energy measurement chip, mature technology such as SMT. It is designed and manufactured according to the multi-channel electricity consumption condition of industry and resident. The meter supports RS485 communication and can exchange data with computer. It is suitable for the energy measurement of DC equipment. The application can be factory, residential house and dc power supply system like building automation, etc.

Communication protocol conforms to Modbus, DL / T 645-2007 "Multifunctional Energy Meter Communication Protocol" and YD / T 1363.3-2005 "Communication Office (Station) Power Supply, Air Conditioning and Environment Centralized Monitoring and Management System Part 3: Front End Intelligent Equipment Agreement".

MAIN FUNCTIONS

- Adopting multiple high-precision energy metering chip to achieve multi-channel DC energy meter's function.
- Each channel meter can measure the current combined energy, individually measure electricity consumption of current month.
- Each channel meter can measure the current, voltage, energy and power.
- Recording and alarming events like undervoltage, overvoltage, power failure, etc.
- Meter will automatically do the energy settlement on the auto meter reading day of each month. Data of last 24 months will be saved.
- Storing data of voltage, current, power, energy, time (year, month, day, hour, minute, second) once every minute. The storage quantity of each data item (voltage, current, power, energy, time) of each channel is 1500.
- Freezing data of voltage, current, power, energy, time(year, month, day, hour, minute, second) once every hour. The storage quantity of each data item
- Storing monthly freezing energy of each month, the storage quantity is 24
- Recording and storing latest 500 alarm records
- LCD digital display, loop displaying various parameters of each channel meter
- Local storage function to ensure energy data won't be lost
- Data inside the meter can be read through RS485 interface
- Supporting broadcast time calibration. Remote time calibration can be realized through RS485 interface
- Function of remote communication, telemetry, remote monitor, remote regulation
- RS485 interface baud rate is settable (600-9600bps), the default meter communication parameter is 2400, e, 8,1.

PARAMETERS

- Input mode: 1~4 channel DC power supply
- Rated operating voltage: -48V, Input voltage: -60V ~ -40V
- Measuring range: the specified working voltage $0.8U_n \sim 1.1U_n$, extended working voltage: $0.6U_n \sim 1.1U_n$
- Input current: 50A, 100A, 200A, 400A, 600A
- Impulse constant: 6400imp / kWh
- Energy measurement range: 0~39999999.99kWh
- Power range: 0~99.9999kW
- Accuracy class: 1.0 / 2.0
- Clock accuracy: $\leq 0.5s/d(23^\circ C)$, variation with temperature change is better than 0.1s / d
- Display type: LCD display
- Standby power consumption: $\leq 2W$
- Altitude: $\leq 5000m$
- Working temperature: $-20^\circ C \sim +60^\circ C$
- Storage temperature: $-40^\circ C \sim +70^\circ C$
- Working humidity: $\leq 98\% (40^\circ C \pm 2^\circ C)$, no condensation
- Installation: 35mm standard din rail installation
- Dimensions: 106.5mm \times 87.5mm \times 59mm
- Weight: about 0.25kg

