Transmitter

control display instrument

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fast acquisition


filtering


nonlinear correction


Scaling transformation


Power on reset


AUTO ZERO


Manual reset (button/communication)


Creep tracking


Sensor over limit record


Input feeding


Opening and unloading


Touch button with button lock

Application

- High speed analog quantity and high frequency output
- Equipped with switch input and output function
- Supports modbus RUT protocol
- RS232/RS485 optional or simultaneous output
- Can set upper, middle, and lower limit alarm functions
- Can lock the peak value and set the valley return difference

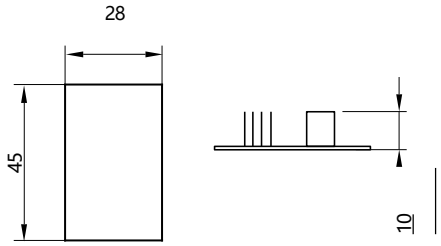


KDEV-B-049A

Product characteristics

- KDEV-B-049A is a sensor signal transmission circuit, the resolution is 1/3000, the output analog signal can be customized: 0 ~ 5V, 0 ~ 10V, 0 ~ 20mA, 4 ~ 20mA, digital signal: RS232. Small size, full function, easy installation.

- **Mounting dimensions**



Technical parameters

(Supply Voltage)	DC:10V~30V	(A/D resolution)	24bit, Delta-Sigma method
(Power consumption)	<3W	(Switching output)	2-way
(Non-linear)	0.4~6mV/V	(sampling rate)	10, 40, 640,1280 Times/second
(Excitation voltage)	5VDC±2%	(Operating temperature)	-30~60℃
(Comprehensive accuracy)	1/10000	(Driving capacity)	100mA(Up to 6 350 Ω sensors)
(Communication Protocol)	Modbus RTU Protocol and Free Agreement	(Contour dimension)	(See dimension diagram above)
(Baud rate)	1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200	(Display accuracy)	1/10000
(Material)	aluminum alloy	(Protection level)	Ip65
(Rated output)	0±10V, 4~20mA, 0~20mA, RS232 interface ; support Modbus RTU Protocol and Free Agreement。RS485 interface ; Up to 32 nodes in parallel; support Modbus RTU protocol and free protocol.		

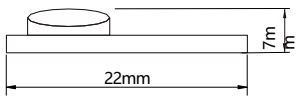


KDEV-B-049E

Product characteristics

- High-speed, high-precision, a variety of digital filtering. RS485 serial port , small size, good stability, strong anti-inte erence.

- **Mounting dimensions**



Technical parameters

(Supply Voltage)	DC8~30V	(Driving capacity)	Drives 1pc load cells 350Ω
(Signal input)	0.3~6mV/V	(External dimensions)	φ22mm, height 7mm
(Excitation voltage)	5VDC±2%, 100mA	(Operating temperature)	-30~60℃
(A/D resolution)	24bit (bina) (24bit)	(A/D conversion rate)	7.5/15/30/60/120(default)/240/480/960/1920/S
(Output po)	Rs485	(Display accuracy)	1/50000
(Communication Protocol)	Modbus RTU/FREE (Free Agreement)	(Power consumption)	About 0.68W
(Baud rate)	1200/2400/4800/9600(default)/19200/38400/57600/115200/230400		

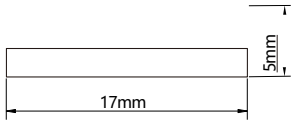


KDEV-B-049F

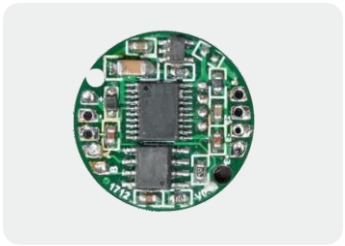
Product characteristics

- A variety of filtering methods, RS485 serial port , small size, good stability, strong anti-interference.

- **Mounting dimensions**



Technical parameters			
(Supply Voltage)	DC6~12V	(Driving capacity)	Drives 1pc load cells 350Ω
(Signal input)	0.3~6mV/V	(External dimensions)	φ17mm, height 5mm
(Excitation voltage)	5VDC±2%, 100mA	(Operating temperature)	-30~60℃
(A/D resolution)	24bit (bina) (24bit)	(A/D conversion rate)	10/40/S
(Output po)	Rs485	(Display accuracy)	1/10000
(Communication Protocol)	Modbus RTU/FREE (Free Agreement)	(Power consumption)	About 0.336W
(Baud rate)	1200/2400/4800/9600(default)/19200/38400/57600		

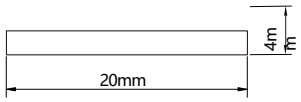


KDEV-B-049G

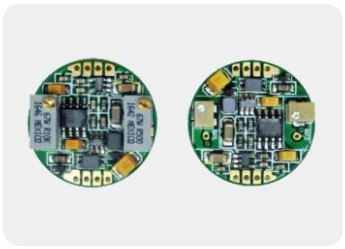
Product characteristics

- High speed, high precision, multi-digital filter, RS485 serial po and 4 ~ 20mA, small size, good stability, strong anti-interference.

- **Mounting dimensions**



Technical parameters			
(Supply Voltage)	DC8~30V	(Driving capacity)	Drives 1pc load cells 350Ω
(Signal input)	0.4~6mV/V	(External dimensions)	φ20mm, height 4mm
(Excitation voltage)	5VDC±2%, 100mA	(Operating temperature)	-30~60℃
(A/D resolution)	24bit (bina)	(A/D conversion rate)	4/20/40/90/180/350/660/1200/S
(Output po)	RS485/4~20mA	(Display accuracy)	1/3000
(Communication Protocol)	Modbus RTU/FREE (Free Agreement)	(Power consumption)	About 0.6W
(Baud rate)	1200/2400/4800/9600/19200/38400/57600/115200		

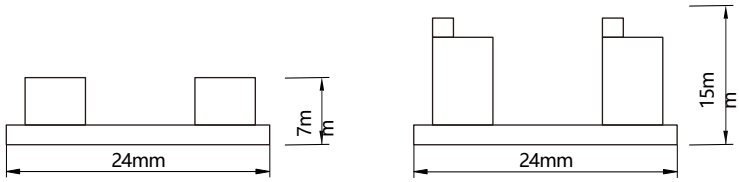


KDEV-B-049H

Product characteristics

- Optional sampling frequency 100HZ or 5000HZ. Many kinds of signals can output 0 ~ 20mA, 4 ~ 20mA, 0 ~ ± 10V, 0 ~ ± 5v. Zero, full degree can be adjusted, good stability, strong anti-interference.

- **Mounting dimensions**



Technical parameters			
(Supply Voltage)	DC15~30V	(Driving capacity)	Drives 1pc load cells 350Ω
(Signal input)	0.4~6mV/V	(External dimensions)	φ 24mm, height 7 or 15mm
(Excitation voltage)	5VDC±2%, 100mA	(Operating temperature)	-30~60℃
(Precision)	<0.05%FS	(Response Frequency)	100HZ/5KHZ (optionoptional)
(Current output)	0~20mA/4~20mA	(Power consumption)	About 1.06W
(Voltage output)	0~±5V/0~±10V		

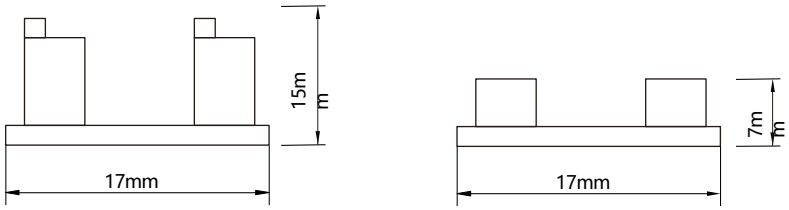


KDEV-B-049I

Product characteristics

- A variety of signals can output 0 ~ 5V, 0 ~ 10V, zero, full degree can be adjusted,
- good stability, strong anti- interference.

- **Mounting dimensions**



Technical parameters

(Supply Voltage)	DC15~24V	(Driving capacity)	Drives 1pc load cells 350Ω
(Signal input)	0.4~6mV/V	(External dimensions)	φ 17mm, height 15 or 7mm
(Excitation voltage)	5VDC±2%, 100mA	(Operating temperature)	-30~60℃
(Precision)	< 0.05%FS	(Response Frequency)	100HZ
(Current output)	0~5V/0~10V	(Power consumption)	About 0.7W

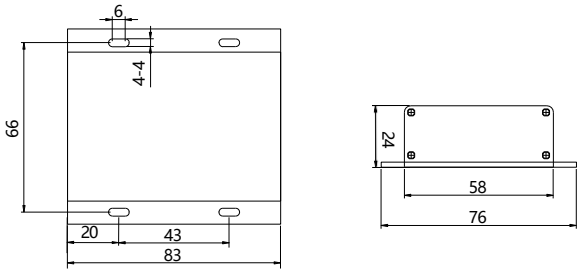


KDEV-B-0B

Product characteristics

- The mechanical quantity can be converted into standard current and voltage signal output, which can be switched to 0-10mA, 0-20mA, 4-20mA, 0-± 5v, 0-± 10v. It can be connected with PLC, MCU, PC terminal or computer directly.

- **Mounting dimensions**



Technical parameters

(Supply Voltage)	16~30VDC or 12~24VAC	(A/D resolution)	1280Hz
(Power consumption)	< 3W	(Switching output)	/
(Non-linear)	0.4~6mV/V	(sampling rate)	/
(Excitation voltage)	default5VDC (12VDCoptional)	(Operating temperature)	-30~85℃
(Comprehensive accuracy)	≤0.05%F.S.	(Driving capacity)	(Up to 4 350 sensors)
(Communication Protocol)	/	(Contour dimension)	(See dimension diagram above)
(Transmission rate)	5KHz	(Display accuracy)	/
(Material)	aluminum alloy	(Protection level)	Ip64
(Rated output)	0~10mA,0~20mA,4~20mA,0~±5V,0~±10V		

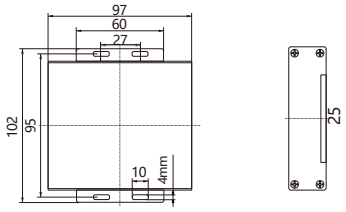
KDEV-B-1B



Product characteristics

- Using aluminum alloy shell, the internal use of original imported high-performance devices, the sensor output signal for precision amplification, internal voltage stabilization, constant current bridge, voltage and current conversion, impedance adaptation, linear compensation, temperature compensation, etc. .
- The mechanical quantity can be converted into the output signal of standard current and voltage, which can be switched to 0-10mA, 0-20mA, 4-20mA, 0-± 5v, 0-± 10v. It can be connected with PLC, MCU, PC terminal or computer directly. It has the function of standard signal external zero adjustment, external gain adjustment, input overvoltage protection, output short circuit protection.

- **Mounting dimensions**



Technical parameters

(Supply Voltage)	DC:10V~30V	(A/D resolution)	/
(Power consumption)	< 3W	(Switching output)	/
(Non-linear)	0.4~6mV/V	(sampling rate)	/
(Excitation voltage)	5VDC±2%	(Operating temperature)	-30~60℃
(Comprehensive accuracy)	1/10000	(Driving capacity)	Two separate sensors
(Communication Protocol)	/	(Contour dimension)	(See dimension diagram above)
(Transmission rate)	/	(Display accuracy)	1/10000
(Material)	aluminum alloy	(Protection level)	Ip65
(Rated output)	0-10mA、0-20mA、4-20mA、0~±5v、0~±10v		

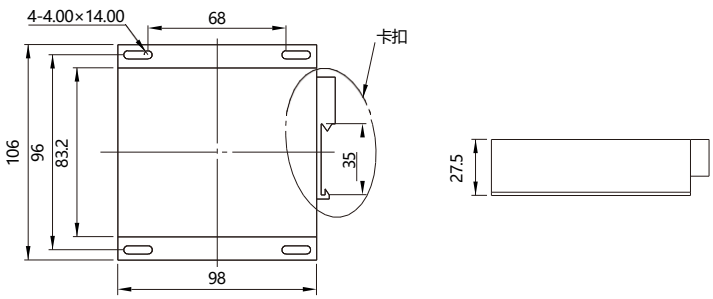
KDEV-B-1D



Product characteristics

- A four-channel analog transmitter amplifies the output signal of the sensor, regulates the internal voltage, constant-current bridge, voltage-current
- conversion, impedance adaptation, linear compensation, temperature compensation and so on. The mechanical quantity is converted into the standard current and voltage signal output.

- **Mounting dimensions**



Selection reference diagram

KDEV-B-1DI	**current output**
KDEV-B-1DV	**Voltage Output**

Technical parameters

(Supply Voltage)	18V~30VDC or 15~22VDC	(A/D resolution)	/
(Power consumption)	< 4W	(Switching output)	/
(Non-linear)	0.4~6mV/V	(sampling rate)	≥5KHZ
(Excitation voltage)	default5VDC (or 12VDCoptional)	(Operating temperature)	-30~60℃
(Comprehensive accuracy)	≤±0.05%FS	(Driving capacity)	Four independent channels, capable of connecting 16 350 Ω sensors
(Communication Protocol)	/	(Contour dimension)	(See dimension diagram above)
(Transmission rate)	/	(Display accuracy)	/
(Material)	aluminum alloy	(Protection level)	Ip64
(Rated output)	0~5v、0~10v、0~±5v、0~±10v、0~20mA、0~10mA、4~20mA。		

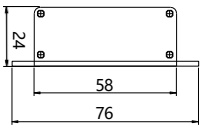


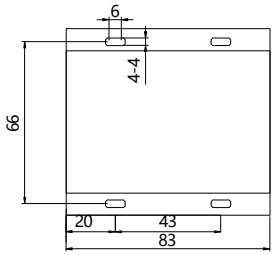
KDEV-B-04

Product characteristics

- KDEV-B-04 transmitter in the same price products, faster, up to 1280 times/second. Resolution 1/3000, RS232 interface; Support Modbus RTU protocol and free protocol. RS485 interface; up to 32 nodes in parallel; suppo
- s Modbus RTU protocol and free protocol. Optional two-way switch output (KDEV-B-04-K2-B) .

- **Mounting dimensions**





Selection reference diagram	
KDEV-B-04	RS485
KDEV-B-04-S4	
KDEV-B-04-S4-M	RS485+analog quantity
KDEV-B-04-S4-M-K	RS485+analog quantity+**Switching quantity**
KDEV-B-04-S4-Y	RS485+Ethernet
KDEV-B-04-S2	RS232
KDEV-B-04-S2-M	RS232+analog quantity
KDEV-B-04-S2-M-K	RS232+analog quantity+**Switching quantity**

Technical parameters

(Supply Voltage)	DC:10V~30V	(A/D resolution)	24bit, Delta-Sigma method
(Power consumption)	< 3W	(Switching output)	/
(Non-linear)	0.4~6mV/V	(sampling rate)	10, 40, 640,1280 Times/second
(Excitation voltage)	5VDC±2%	(Operating temperature)	-30~60℃
(Comprehensive accuracy)	1/10000	(Driving capacity)	100mA(Up to 6 350 Ω sensors)
(Communication Protocol)	Modbus RTU Protocol and Free Agreement	(Contour dimension)	(See dimension diagram above)
(Baud rate)	1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200	(Display accuracy)	1/10000
(Material)	aluminum alloy	(Protection level)	Ip65
(Rated output)	0±10V, 4~20mA, 0~20mA, RS232; Interface support Modbus RTU Protocol and Free Agreement。RS485 interface ; Up to 32 nodes in parallel ; support Modbus RTU Protocol and Free Agreement。		

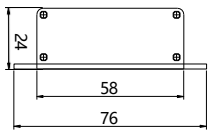


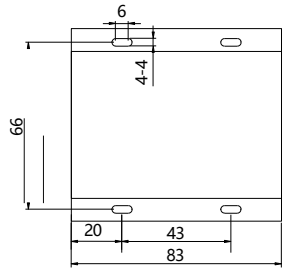
KDEV-B-05

Product characteristics

- High frequency transmitter, suppo both RS232 and RS485, baud rate up to
- 921600, analog: 0 ~ ± 10V, 4 ~ 20mA, 0 ~ 20mA, Resolution 16000, analog and RS232 communication for one or the other.

- **Mounting dimensions**





Selection reference diagram	
KDEV-B-05	RS232+RS485
KDEV-B-05-A1	RS485+analog quantity

Technical parameters

(Supply Voltage)	DC:9V~30V	(A/D resolution)	24bit (bina)
(Power consumption)	< 3W	(Switching output)	/
(Non-linear)	0.4~6mV/V	(sampling rate)	10~4800Times/second
(Excitation voltage)	default5VDC	(Operating temperature)	-30~60℃
(Comprehensive accuracy)	≤0.05%F.S.	(Driving capacity)	100mA(Up to 6 350 Ω sensors)
(Communication Protocol)	Modbus RTU Protocol and Free Agreement	(Contour dimension)	(See dimension diagram above)
(Baud rate)	1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200, 921600	(Display accuracy)	1/100000
(Material)	aluminum alloy	(Protection level)	Ip65
(Rated output)	0±10V, 4~20mA, 0~20mA, RS232; support Modbus RTU Protocol and Free Agreement。RS485; support Modbus RTU Protocol and Free Agreement。		



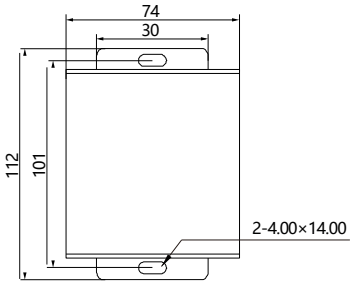
KDEV-B-1442

Product characteristics

- KDEV-B-1442 transmitter, with 2 independent channels, at the same time with Teds function. RS232, RS485 communication interface one of two options; to need two independent sensor data, provides a better, more convenient solution.

- **Mounting dimensions**





Selection reference diagram	
KDEV-B-04D2-C1	RS232
KDEV-B-04D2-C2	RS485
KDEV-B-04D2-C2-W	RS485+Ethernet

Technical parameters

(Supply Voltage)	DC:10V~30V	(A/D resolution)	24bit (bina)
(Power consumption)	< 3W	(Switching output)	/
(Non-linear)	0.4~6mV/V	(sampling rate)	1280Times/second
(Excitation voltage)	5VDC±2%	(Operating temperature)	-30~60℃
(Comprehensive accuracy)	1/10000	(Driving capacity)	Each channel drives 2 350 ohm sensors
(Communication Protocol)	Modbus RTU/ASGII/FREE(Free	(Contour dimension)	(See dimension diagram above)
(Baud rate)	1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200	(Display accuracy)	1/10000
(Material)	aluminum alloy	(Protection level)	Ip64
(Rated output)	RS232, RS485Choose one from two; support Modbus RTU/ASGII/FREE(Free Agreement)。		



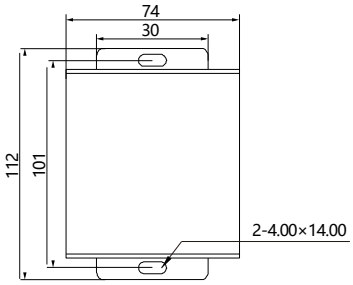
KDEV-B-1443

Product characteristics

- KDEV-B-1443 transmitter has three independent channels, can be connected to three-way sensors, and small size, high accuracy. For the convenience of multi-point measurement.

- **Mounting dimensions**





Selection reference diagram	
KDEV-B-04D3-C1	RS232
KDEV-B-04D3-C2	RS485
KDEV-B-04D3-C2-W	RS485+Ethernet

Technical parameters

(Supply Voltage)	DC:10V~30V	(A/D resolution)	24bit (bina)
(Power consumption)	< 3W	(Switching output)	/
(Non-linear)	0.4~6mV/V	(sampling rate)	1280Times/second
(Excitation voltage)	5VDC±2%	(Operating temperature)	-30~60℃
(Comprehensive accuracy)	1/10000	(Driving capacity)	Each channel drives 2 350 ohm sensors
(Communication Protocol)	Modbus RTU/ASGII/FREE(Free Agreement)	(Contour dimension)	(See dimension diagram above)
(Baud rate)	1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200	(Display accuracy)	1/10000
(Material)	aluminum alloy	(Protection level)	Ip64
(Rated output)	RS232, RS485Choose one from two; support Modbus RTU/ASGII/FREE(Free Agreement)。		

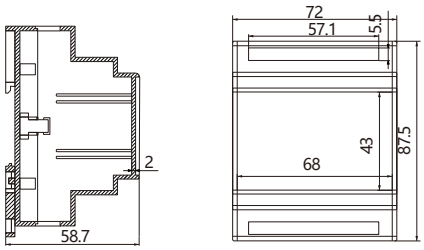


KDEV-B-044

Product characteristics

- KDEV-B-044 four-channel transmitter adds the TEDS function, the amplifier needs to be connected to the smart sensor, the smart sensor has its own digital memory , the memory contains information such as sensor model
- number, serial number, sensitivity, last calibration date and so on. Plug and play and self-calibration capability.

- **Mounting dimensions**

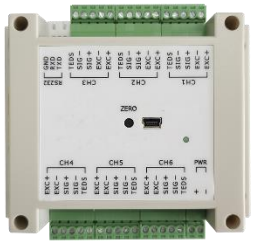


Selection reference diagram

KDEV-B-044	RS485
KDEV-B-044-S1	RS232
KDEV-B-044-S4-Y	RS485+Ethernet

Technical parameters

(Supply Voltage)	DC:10V~30V	(A/D resolution)	24bit, Delta-Sigma method
(Power consumption)	<4W	(Switching output)	/
(Non-linear)	0.4~6mV/V	(sampling rate)	10, 40, 640,1280 Times/second
(Excitation voltage)	5VDC±2%, 100mA	(Operating temperature)	-30~60℃
(Comprehensive accuracy)	1/10000	(Driving capacity)	5VDC±2%, 100mA
(Communication Protocol)	Modbus RTU Protocol and Free Agreement	(Contour dimension)	(See dimension diagram above)
(Baud rate)	1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200	(Display accuracy)	1/10000
(Material)	plastics	(Protection level)	Ip65
(Rated output)	RS232 interface ; support Modbus RTU Protocol and Free Agreement。RS485 interface ; Up to 32 nodes in parallel ; support Modbus RTU Protocol and Free Agreement。		

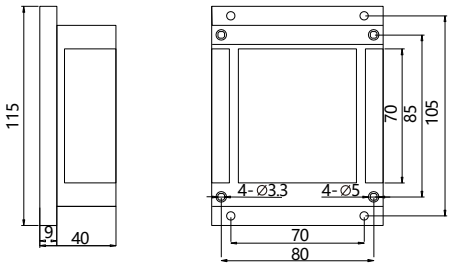


KDEV-B-064

Product characteristics

- KDEV-B-064, 6-channel rail digital output transmitter, sampling frequency up
- to 1280/s, 6 independent channels, with simple operation, easy installation and so on.

- **Mounting dimensions**



Selection reference diagram

KDEV-B-064-S2	Rs232
KDEV-B-064-S4	Rs485
KDEV-B-064-S4-Y	RS485+Ethernet

Technical parameters

(Supply Voltage)	DC:10V~30V	(A/D resolution)	24bit (bina)
(Power consumption)	<5W	(Switching output)	/
(Non-linear)	0.4~6mV/V	(sampling rate)	10, 40, 640, 1280Hz
(Excitation voltage)	5VDC±2%, 100mA	(Operating temperature)	-30~60℃
(Comprehensive accuracy)	1/10000	(Driving capacity)	6-way sensor
(Communication Protocol)	Modbus RTU Protocol and Free Agreement	(Contour dimension)	(See dimension diagram above)
(Baud rate)	1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200	(Display accuracy)	1/10000
(Material)	plastics	(Protection level)	Ip64
(Rated output)	RS232 or RS485 (Free Agreement, Modbus RTU and ASCII)。		

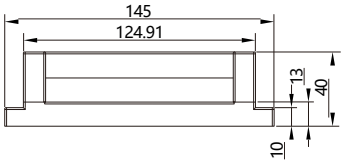
KDEV-B-084

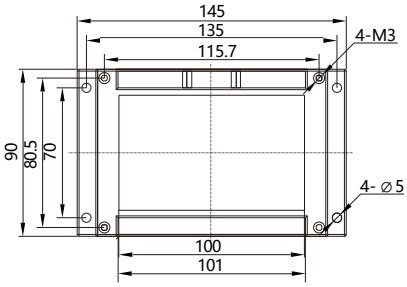


Product characteristics

- KDEV-B-084 eight-channel digital transmitter is a high-quality product designed for various industrial applications. It processes the weak weight signal of the weighing sensor (group), through RS232, RS485 serial communication output to the user's upper system.

- **Mounting dimensions**





Selection reference diagram

KDEV-B-084Y	Digital quantity485+232
KDEV-B-084-S4-Y	RS485+Ethernet

Technical parameters

(Supply Voltage)	DC:10V~30V	(A/D resolution)	24bit, Delta-Sigma method
(Power consumption)	<6W	(Switching output)	/
(Non-linear)	0.4~6mV/V	(sampling rate)	10, 40, 640, 1280Times/second
(Excitation voltage)	5VDC±2%	(Operating temperature)	-30~85℃
(Comprehensive accuracy)	1/10000	(Driving capacity)	8-way sensor
(Communication Protocol)	Modbus RTU Protocol and Free Agreement	(Contour dimension)	(See dimension diagram above)
(Baud rate)	1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200	(Display accuracy)	1/10000
(Material)	plastics	(Protection level)	Ip64
(Rated output)	Simultaneously supporting RS232 and RS485(Modbus RTU、FREE、ASCII)。		

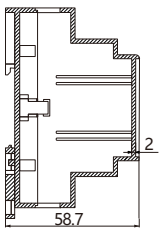
KDEV-B-326

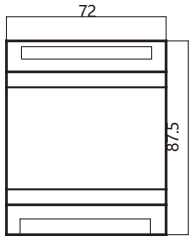


Product characteristics

- KDEV-B-326 rail force display controller, speed up to 1280 times/second. Support RS232 and RS485 communication. In the selection process,
- customers can choose to add the basic section based on Teds, analog volume and other functions. This controller's comparator is also more flexible, compares the way to be diverse, the user may build the comparison pattern by oneself.

- **Mounting dimensions**





Selection reference diagram

KDEV-B-326	RS232+RS485
KDEV-B-326-S2-S4SY	RS232+RS485+analog quantity

Technical parameters

(Supply Voltage)	DC:10V-30V	(Communication output)	Simultaneously supportingRS232 and RS485
(Input sensitivity)	0.4mV/V~6mV/V	(Protocol type)	Mod bus RS232 and Free Agreement
(Display Window)	Single row six position LED	(Operating temperature)	-30~60℃
(Excitation voltag)	5VDC±2%, 100mA(Up to 6 pieces) 350 Ω sensor)	(Withstand voltage)	At 2000V AC50/60Hz for 1 minute
(A/d performance)	24bit, Del ta-Signa method	(Protection level)	Ip64
(Display accuracy)	1/10000	(Surrounding Environment)	Temperature: -10~55℃: Storage -25~65℃ Humidity: 35~85% RH: Storage 35~85% RH
(Output rate)	10、40、640、1280Times/second	(Switching quantity)	3-point transistor output, 24V/1A on load Ability, 2-way input
(Baud rate)	1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200	(Analog output)	0~±10V、0~20mA、 4~20mA:resolution ratio1/3000

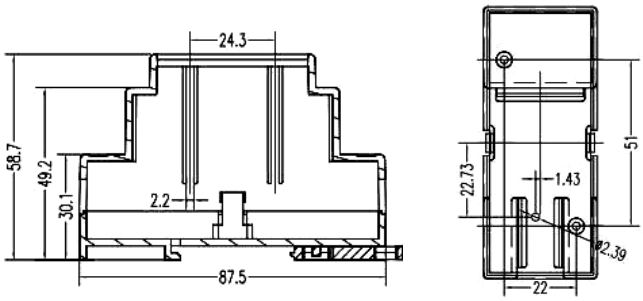


KDEV-B-35

Product characteristics

- Track-type signal amplifier display, track-type design, small size, easy to install.
- The whole machine EMC design, anti-interference ability, suitable for industrial environment.

- **Mounting dimensions**



Technical parameters

(Supply Voltage)	DC12~30V	(A/D resolution)	24bit, Delta-Sigma method
(Power consumption)	< 3W	(Switching output)	2-point transistor switch
(Non-linear)	0~4mV/V	(sampling rate)	10 、40、640、1280Times/second
(Excitation voltage)	5VDC±2%	(Operating temperature)	-30~60℃
(Comprehensive accuracy)	1/10000	(Driving capacity)	6 350 Ω sensors
(Communication Protocol)	Modbus RTU and Free Agreement	(Contour dimension)	(See dimension diagram above)
(Baud rate)	1200, 2400, 4800, 9600, 19200, 38400, 57600	(Display accuracy)	1/10000
(Material)	plastics	(Protection level)	Ip65
(Rated output)	Rs485		



KDEV-B-36-3T(3 channels)



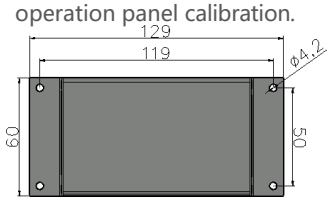
KDEV-B-36-6T(6 channels)

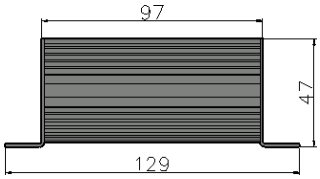
- **Mounting dimensions**

KDEV-B-36-3T / KDEV-B-36-6T

Product characteristics

- This data collector is a multi-channel high-speed weight data collector. It adopts CAN, RS-485 communication, supports standard ModBus-RTU communication protocol and external operation panel calibration.





Technical parameters

(Show the window)	Customized dual row LED display	(Excitation voltage)	5VDC
(Number of sensor channels)	6 channels	(Power supply)	24±5VDC
(Readability)	1/900000	(Power consumption of the whole machine)	≤10W
(The output is linear)	< 0.002%	(Operating temperature range)	-20 ~ 70℃
(Comprehensive accuracy)	Better than 0.01%	(Weight per piece)	0.5kg
(A/d conversion speed)	≤1280Times/second	(Materials)	Aluminum ally
(Accept sensitivity)	-7.2~+7.2 m V/V	(Protection level)	Ip65
(Input load)	1-4 350 Ω sensors	(Input interface)	Not Supported
(Output specifications)	±10V / 0 ~ 10V / 4 ~ 20mA	(Output interface)	Not Supported
(Full range temperature drift)	≤10ppm /℃	(Analog quantities)	Not Supported
(Zero temperature drift)	≤10μV /℃	(Communication interface)	CAN and RS-485

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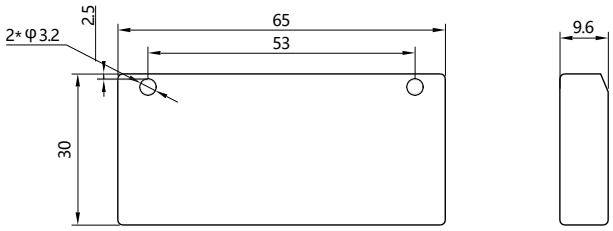


KDEV-B-39

Product characteristics

- Ultra-small volume, OLED LCD display, speed up to 1760 times/second, can output digital or analog signals, suitable for installation space is limited in a variety of occasions.

- **Mounting dimensions**



Technical parameters

(Supply Voltage)	13~17V AC50/60Hz 18~32V DC	(A/D resolution)	24bit (binary)
(Power consumption)	< 5W	(Switching output)	/
(Non-linear)	1.0~7.0mV/V	(sampling rate)	≥1760Hz
(Excitation voltage)	DC5V,100mA	(Operating temperature)	-10~50℃
(Comprehensive accuracy)	5/100000	(Driving capacity)	6 350 Ω sensors
(Communication Protocol)	Modbus RTU and Free Agreement	(Contour dimension)	(See dimension diagram above)
(Baud rate)	2400、4800、9600、19200、38400、57600、115200、230400、336K、500K、1M、1.5M、2M、3M	(Display accuracy)	OLED **LCD screen display**
(Material)	plastics	(Protection level)	Ip65
(Rated output)	**voltage**: 0~10V, ±10VRs485 interface , Modbus-RTU and TC ASCLL **agreement**		

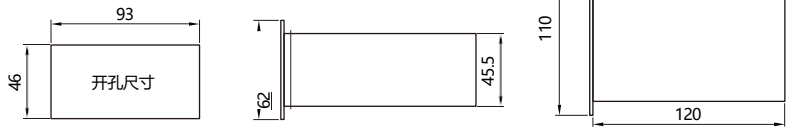
KDEV-B-40



Product characteristics

- The controller has the advantages of small volume, high precision and high speed, and is suitable for various industrial fields which need to be weighed and force-measured. With three or four sensor inputs, suitable for three-dimensional force measurement and other occasions.

- **Mounting dimensions**



Selection reference diagram

KDEV-B-40	transistor、Digital quantity
KDEV-B-40-A	transistor、Digital quantity 、analog quantity
KDEV-B-40-V	transistor、Digital quantity 、voltage
KDEV-B-40-W	transistor、Digital quantity 、Ethernet

Technical parameters

(Show the window)	4-way 6-bit LED display	(Zero Drift)	≤10μV/℃
(The graduation value)	1、2、5、10、20、50	(Range temperature coefficient	≤0.02%FS/℃
(Maximum scale display range)	999999	(Sensor type)	3-way or 4-way resistance strain sensor
(The number of decimal places)	0、0.0、0.00 、 0.000、0.0000、0.00000	(Sensor excitation voltage)	DC5V, Can connect 4 350 Ω sensors in parallel
(Static accuracy rating)	Resolution 900000	(Switch output (contact) capacity)	3-way transistor output capacity : DC24V 0.5A
(Maximum signal input range)	-30 mV ~ +30 mV (-6mV/V~+6mV/V)	(Switching quantity input voltage)	DC24V
(Zero Drift)	≤0.05μV (@ 0.02mV/V)	(Switch quantity input current	4-6mA
(Range temperature coefficient)	≤10ppm/℃	(Power Range)	DC24V (±5V)
(Input impedance of sensor interface)	≥20MΩ	Product power)	≤10W
(Nonlinear error)	≤0.002%FS	(Operating temperature)	-10°C~50°C
(A/d conversion speed)	≤ 3200 Times/second	(Humidity range)	≤90% Relative humidity (without condensate)
(Analog quantities)	Supports up to 4 analog outputs simultaneously	communication interface	RS-485 and RS-232, standard Modbus RTU protocol support, optional network port

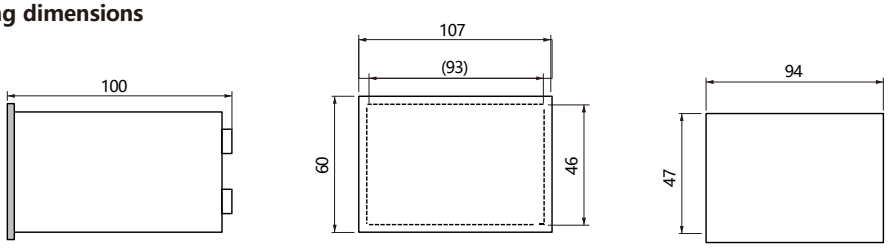
KDEV-B-491



Product characteristics

- Three-dimensional force meter, input signal optional: MV, V, MA, optional RS232 and RS485 interface external PC IPC/PLC and LED remote display.

- **Mounting dimensions**



Technical parameters

(Supply Voltage)	DC24V~20%	(A/D resolution)	/
(Power consumption)	< 5W	(Switching output)	Transistor: 2-way
(Non-linear)	±35mV	(sampling rate)	≤1760Hz
(Excitation voltage)	DC5V,100mA	(Operating temperature)	-10~50℃
(Comprehensive accuracy)	0.005%FS	(Driving capacity)	Single 3D force sensorSingle 3D force sensor
(Communication Protocol)	RS485&RS232, Choose any one of them through the internal dial switch	(Contour dimension)	(See dimension diagram above)
(Baud rate)	1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200	(Display accuracy)	1/5000
(Material)	aluminum alloy	(Protection level)	Ip65
(Rated output)	**voltage**: 0~10V, ±10VRs485 interface , Modbus-RTU和TC ASCLL协议		



KDEV-B-51

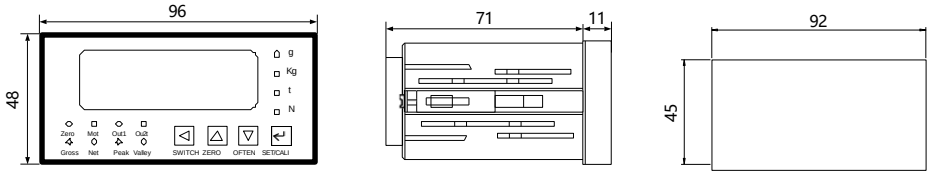
Product characteristics

- Faster, up to 1,280 times per second. You can choose to add the following features to the basic section: 1. With Teds; 2. With analog output 0 ~ 20mA, 4 ~ 20mA, 0 ~ ± 10v; 3. Band communication, operable protocol inside all functions.

Selection reference diagram

KDEV-B-51-J	transistor
KDEV-B-51-J-M	transistor+analog quantity
KDEV-B-51-J-S2	transistor+RS232
KDEV-B-51-J-S4	transistor+RS485
KDEV-B-51-R1	relay
KDEV-B-51-R1-M	relay+analog quantity
KDEV-B-51-R1-S2	relay+RS232
KDEV-B-51-R1-S4	relay+RS485

- **Mounting dimensions**



Technical parameters

(Supply Voltage)	DC: 9V~30V	(A/D resolution)	24bit, Delta-Sigma method
(Power consumption)	< 5W	(Switching output)	Transistor: 3 channels; Relay: 2 circuits
(Non-linear)	0.4~6mV/V	(sampling rate)	10 、40、640Times/second
(Excitation voltage)	default5VDC (or 12VDCoptional)	(Operating temperature)	-30~60℃
(Comprehensive accuracy)	≤±0.05%FS	(Driving capacity)	Up to 6 350 Ω sensors
(Communication Protocol)	/	(Contour dimension)	(See dimension diagram above)
(Baud rate)	1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200	(Display accuracy)	1/10000
(Material)	plastics	(Protection level)	Ip65
(Display Window)	Single row five bit LED highlight display (0.56 inches)		
(Rated output)	0~±10V、0~20mA、4~20mA; resolution ratio1/3000, RS232 interface : support Modbus RTU Protocol and Free Agreement, RS485 interface , Up to 32 nodes in parallel : support Modbus RTU Protocol and Free Agreement。		



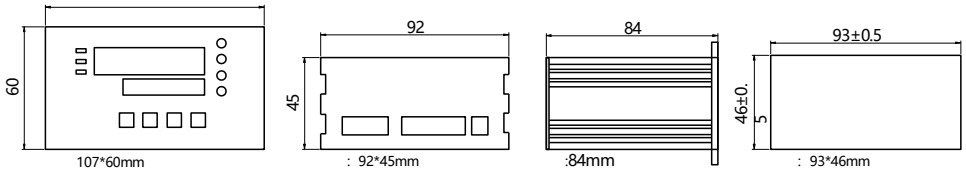
KDEV-B-52

Product characteristics

- KDEV-B-52 force value display controller, speed up to 3200 times/second, at the same time in the selection process, customers can choose to add TEDS, analog and other functions, this controller is more flexible comparator, comparison mode.

Mounting dimensions

- 107



Selection reference diagram

KDEV-B-52	RS232+RS485
KDEV-B-52-S2-S4-M	RS232+RS485+analog quantity

Technical parameters

(Supply Voltage)	DC: 12V~30V	(A/D resolution)	24bit, Delta-Sigma method
(Power consumption)	<5W	(Switching output)	Transistor: 3 channels, relay 2 points
(Non-linear)	0.4~6mV/V	(sampling rate)	10 、40、640、1280Times/second
(Excitation voltage)	5VDC±2%	(Operating temperature)	-10~55℃
(Comprehensive accuracy)	≤±0.05%FS	(Driving capacity)	100mA (6 350 Ω sensors)
(Communication Protocol)	Modbus RTU Protocol and Free Agreement	(Contour dimension)	(See dimension diagram above)
(Baud rate)	1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200	(Display accuracy)	1/10000
(Material)	aluminum alloy	(Protection level)	Ip65(Front part of the product)
(Display Window)	Double row six position LED		
(Rated output)	support Modbus RTU, ASCII and Free agreement, while supporting RS232 and 485。		

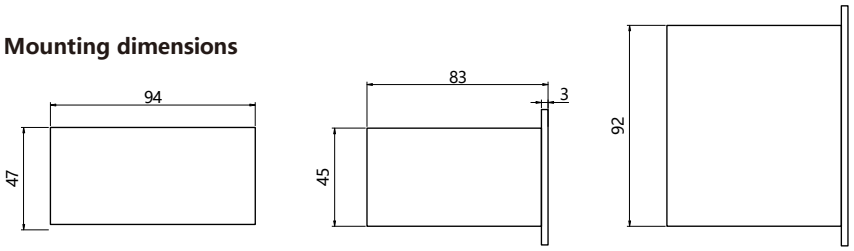


KDEV-B-53

Product characteristics

- KDEV-B-53 force display controller, with more stable performance, 128 × 32 full-lattice OLED display screen, can display more content; and the addition of Chinese interface, making the setting more simple and intuitive.

- **Mounting dimensions**



Selection reference diagram

KDEV-B-53	RS232+RS485
KDEV-B-53-S2-S4-M	RS232+RS485+analog quantity

Technical parameters

(Supply Voltage)	DC: 12V~30V	(A/D resolution)	24bit, Delta-Sigma method
(Power consumption)	<5W	(Switching output)	Transistor: 3 channels, relay: 2 channels
(Non-linear)	0.4~6mV/V	(sampling rate)	10 、40、640、1280Times/second
(Excitation voltage)	5VDC±2%	(Operating temperature)	-10~55℃
(Comprehensive accuracy)	≤±0.05%FS	(Driving capacity)	100mA(6 350 Ω sensors)
(Communication Protocol)	Modbus RTU Protocol and Free Agreement	(Contour dimension)	(See dimension diagram above)
(Baud rate)	1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200	(Display accuracy)	1/10000
(Material)	aluminum alloy	(Protection level)	Ip65(Front part of the product)
(Display Window)	128 × 32 full lattice OLED display screen		
(Rated output)	Supports Modbus RTU, ASCII, and free protocols, as well as RS232 and 485.		

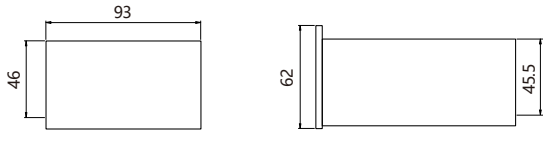


KDEV-B-61

Product characteristics

- Analog output signal can choose 0-20mA, 4-20mA, 0-10V, 1-5V, digital communication inte ace can choose RS485 or RS232, all band isolation. The
- double-row 6-bit LED digital tube displays real-time measurement value, peak value, output current value and I/O status signal respectively.

- **Mounting dimensions**



Selection reference diagram	
KDEV-B-61-R1-S	relay、Digital quantity
KDEV-B-61-R1-S-L	relay、Digital quantity、current
KDEV-B-61-R1-S-V	relay、Digital quantity、voltage
KDEV-B-61-J--S	transistor、Digital quantity
KDEV-B-61-J-S-L	transistor、Digital quantity、current
KDEV-B-61-JS-V	transistor、Digital quantity

Technical parameters

(Supply Voltage)	DC24V (±5V)	(A/D resolution)	1600Times/second
(Power consumption)	10W	(Switching output)	Transistor: 6 channels; Relay: 6 circuits
(Non-linear)	-3.6 mV/V ~ 3.6 mV/V	(sampling rate)	10,40,640,1280Times/second
(Excitation voltage)	DC5V	(Operating temperature)	-30~50℃
(Comprehensive accuracy)	≤±0.002%FS	(Driving capacity)	Can connect 8 350 Ω sensors in parallel
(Communication Protocol)	Modbus RTU Protocol and Free Agreement	(Contour dimension)	(See dimension diagram above)
(Baud rate)	1200、2400、4800、9600、19200、38400、57600、115200	(Display accuracy)	1/100000
(Material)	aluminum alloy	(Protection level)	Ip64
(Display Window)	Double row 6-digit LED display		
(Rated output)	Analog signals: 0-20mA, 4-20mA, 0-10V, 1-5V, digital communication: RS485 or RS232, all with isolation.。		

KDEV-B-611

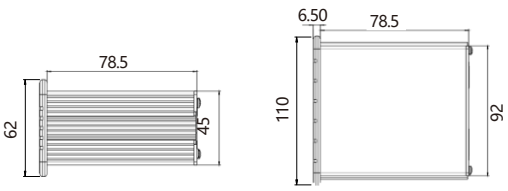
Product characteristics

- The controller has small volume, double-row 6-bit display, high precision and high
- speed, and is suitable for all kinds of industrial f i elds that need to be weighed
- and force measured.
- The analog output signals include 4-20mA and 10V.
- Communication interface supports RS-485 and RS-232, Standard
- Modbus protocol support . Support TEDS smart Sensor function.
- The Controller has the function of judging upper limit, middle limit and lower limit.



- **Mounting dimensions**

KDEV-B-611-S-M	Digital quantity、analog quantity
KDEV-B-611-S	Digital quantity



Technical parameters

(Display Window)	Double row LED display	(Zero Drift)	≤10μV/℃
(Graduation value)	1、2、5、10、20、50	(Range temperature coefficient)	≤0.02%FS/℃
(Maximum scale display range)	999999	(Sensor type)	resistance strain sensor
(Number of decimal places)	0、0.0、0.00 、0.000、0.0000、0.00000	(Sensor excitation voltage)	DC5V，Can connect 4 350 Ω sensors in parallel
(Static accuracy rating)	resolution ratio900000	(Switch output (contact) capacity)	3-way relay output capacity: AC220V 1A 4-way relay output capacity: DC24V 0.5A
(Maximum signal input range)	-30 mV ~ +30 mV(-6mV/V~+6mV/V)	(Switching quantity input voltage)	DC24V
(Zero Drift)	≤0.05μV (@ 0.02mV/V)	(Switch quantity input current)	4-6mA
(Range temperature coefficient)	≤10ppm/℃	(Power Range)	DC24V (±5V)
(Input impedance)	≥20MΩ	(Product power)	≤10W
(Nonlinear error)	≤0.002%FS	(Operating temperature)	-10℃~50℃
(A/d conversion speed)	≤3200 Times/second	(Humidity range)	≤90% Relative humidity (without condensate)

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KDEV-B-612

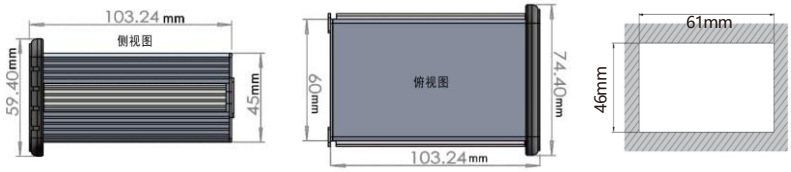


Product characteristics

- The controller is smaller, full-featured, double-row 6-bit display, high precision, high speed, suitable for various needs of weighing, force measurement of industrial sites.
- The analog output signals include 4-20mA and 10V.
- Communication inte ace supports RS-485 and RS-232, Standard Modbus protocol support . Support TEDS smart Sensor function.
- The Controller has the function of judging upper limit, middle limit and lower limit.

- **Mounting dimensions**

KDEV-B-612-J-S	transistor、Digital quantity
KDEV-B-612-J-S-M	transistor、Digital quantity、analog quantity
KDEV-B-612-R1-S	Continuator、Digital quantity
KDEV-B-61B-R1-S-M	Continuator、Digital quantity、analog quantity
KDEV-B-612-Y	Ethernet



Technical parameters

(Display Window)	Double row LED display	(Zero Drift)	≤10μV/℃
(Graduation value)	1、2、5、10、20、50	(Range temperature coefficient)	≤0.02%FS/℃
(Maximum scale display range)	999999	(Sensor type)	resistance strain sensor
(Number of decimal places)	0、0.0、0.00 、 0.000、0.0000、0.00000	(Sensor excitation voltage)	DC5V，Can connect 4 350 Ω sensors in parallel
(Static accuracy rating)	resolution ratio900000	(Switch output (contact) capacity)	Relay output capacity：AC220V 1A 3 channels/transistor output capacity in total：DC24V 0.5A
(Maximum signal input range)	-30 mV ~ +30 mV(-6mV/V~+6mV/V)	(Switching quantity input voltage)	DC24V
(Zero Drift)	≤0.05μV（@ 0.02mV/V)	(Switch quantity input current)	4-6mA
(Range temperature coefficient)	≤10ppm/℃	(Power Range)	DC24V（±5V)
(Input impedance)	≥20MΩ	(Product power)	≤10W
(Nonlinear error)	≤0.002%FS	(Operating temperature)	-10℃~50℃
(A/d conversion speed)	≤3200 Times/second	(Humidity range)	≤90% Relative humidity (without condensate)

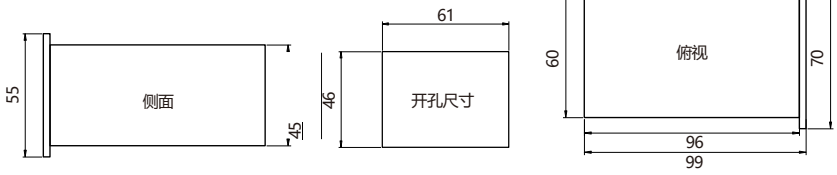
KDEV-B-619



Product characteristics

- Double-row LED digital display real-time measurement value, peak value, output current value, I/O status information. The panel area is only 70mm (width) × 55mm (height) .

- **Mounting dimensions**



Selection reference diagram	
KDEV-B-619-S2-J	RS232+transistor
KDEV-B-619-S2-J-L	RS232+transistor+current
KDEV-B-619-S2-J-V	RS232+transistor+voltage
KDEV-B-619-S4-J	RS485+transistor
KDEV-B-619-S4-J-L	RS485+transistor+current
KDEV-B-619-S4-J-V	RS485+transistor+voltage

Technical parameters

(Supply Voltage)	DC24V （±5V)	(A/D resolution)	1600Times/second
(Power consumption)	10W	(Switching output)	Transistor: 3 channels; Relay: 3 circuits
(Non-linear)	-3.6 mV/V ~ 3.6 mV/V	(sampling rate)	1280Times/second
(Excitation voltage)	DC5V	(Operating temperature)	-30~50℃
(Comprehensive accuracy)	≤±0.002%FS	(Driving capacity)	Can connect 4 350 Ω sensors in parallel
(Communication Protocol)	Modbus RTU Protocol and Free Agreement	(Contour dimension)	(See dimension diagram above)
(Baud rate)	1200、2400、4800、9600、19200、38400、57600、115200	(Display accuracy)	1/100000
(Material)	aluminum alloy	(Protection level)	Ip64
(Display Window)	Double row 6-digit LED display		
(Rated output)	Analog signals: 4-20mA, 0-10V, 1-5V, digital communication: RS485 or RS232, all with isolation.		

KDEV-B-62



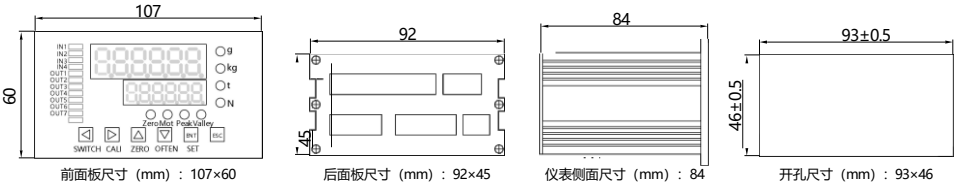
Product characteristics

- High-frequency display controller, support RS232 and RS485, baud rate up to 921600, switching: 5-point transistor output, 2-point relay output, analog: 0 ~ ± 10 V, 4 ~ 20 ma, 0 ~ 20 ma, Resolution 160000.

- **Mounting dimensions**

Selection reference diagram

KDEV-B-62	RS232+RS485
KDEV-B-62-S2-S4-M	RS232+RS485+analog quantity



前面板尺寸（mm）：107×60　后面板尺寸（mm）：92×45　仪表侧面尺寸（mm）：84　开孔尺寸（mm）：93×46

Technical parameters

(Supply Voltage)	DC:12V~30V	(A/D resolution)	24bit，Delta-Sigma method
(Power consumption)	< 5W	(Switching output)	Transistor: 5 channels; Relay: 2 circuits; 4 inputs
(Non-linear)	0.4~6mV/V	(sampling rate)	1280Times/second
(Excitation voltage)	5VDC±2%	(Operating temperature)	-30~60℃
(Comprehensive accuracy)	≤±0.05%FS	(Driving capacity)	100mA(Up to 6 350 Ω sensors)
(Communication Protocol)	Modbus RTU、 ASCII and Free Agreement	(Contour dimension)	(See dimension diagram above)
(Baud rate)	10 、40、80、120、200、400、600、800、1200、1600、2400、4800Times/second	(Display accuracy)	Double row 6-position LED
(Material)	aluminum alloy	(Protection level)	Ip64
(Display Window)	Double row 6-digit LED display		
(Rated output)	0~±10V、0~20mA、4~20mA;resolution ratio1/60000，Supports both RS232 and RS485, with a maximum baud rate of 921600. Switching quantity: 5-point transistor output (maximum IA), 2-point relay output, 4-point input		

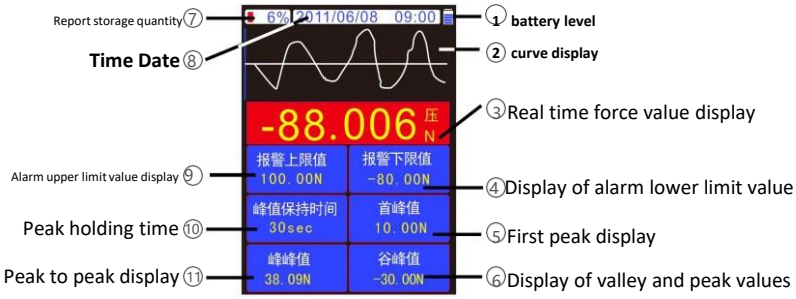
KDEV-B-70



Product characteristics

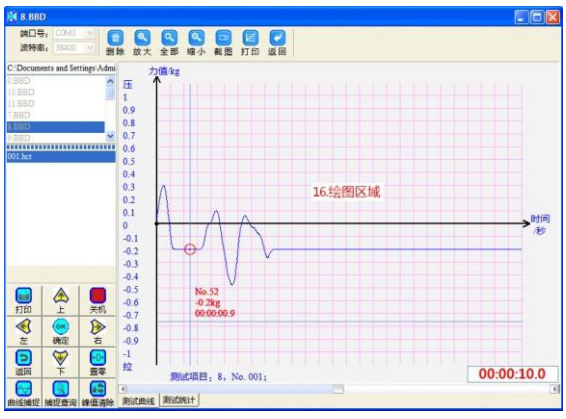
- The push-pull force meter is a small portable instrument for measuring thrust and pull force, with high precision and high resolution; 2.8-inch true color display; cu
- e monitoring of the whole test process; pull- off and stop; upper and lower limit setting; It can store 100 sets of test repo s and 1 set of test curves; three kinds of units (kg, n, lb) can be switched; test material strength function; peak holding function; The peak value auto-deactivation function and deactivation time can be set.

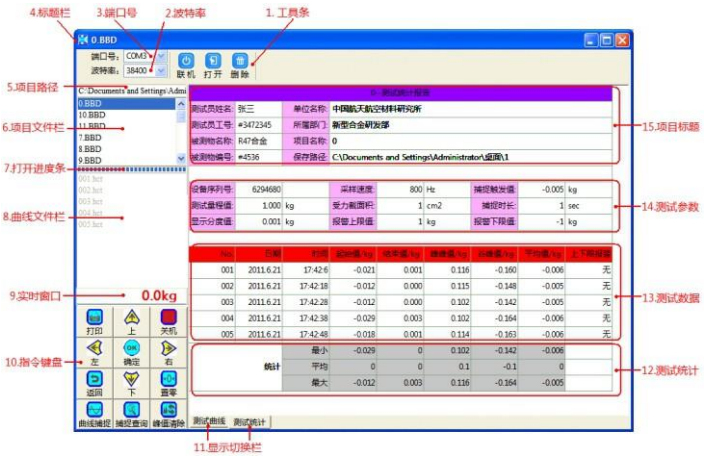
- **Mounting dimensions**



1	2.8 inch TFT true color display screen; Direction buttons and display screen can be flipped 180° 。
2	Built in real-time clock, capable of displaying real-time time and date; USB data interface, supports hot swapping.
3	The peak value, real-time value, and testing process curve are displayed on the same screen, and the entire testing process can be monitored and traced.
4	The fracture alarm value, fracture alarm dead zone/upper and lower limit deviation values can be freely set; Any selection of fracture/within limit/outside limit alarms; After reaching the alarm value, the buzzer and display screen will simultaneously prompt an alarm. It is equipped with two open collector level outputs as standard, which can directly drive DC 12V relays or solenoid valves and other actuators. Each drive current is 50mA. When using the output port, please connect it to a power adapter for use.
5	Three units of N, kg, and lb are automatically converted, and the strength unit Mpa can be automatically converted. 。
6	Equipped with peak holding function, automatic peak release, and adjustable release time 。
7	100 sets of test reports can be permanently saved, including test time, peak value, average valley value, etc. Additionally, one set of curves can be saved to trace the entire testing process.
8	Test material strength by inputting the cross-sectional area of the material.
9	Power saving functions such as automatic shutdown without operation and automatic backlighting can be set arbitrarily.
10	Switching between Chinese and English; Built in graphic and text instructions, various operations are intuitive and clear 。
11	Through dedicated testing software provided with PC, it is possible to store, transmit, and trace test curve data infinitely 。
12	Various testing machines can be optionally equipped to achieve various tests.

Technical parameters





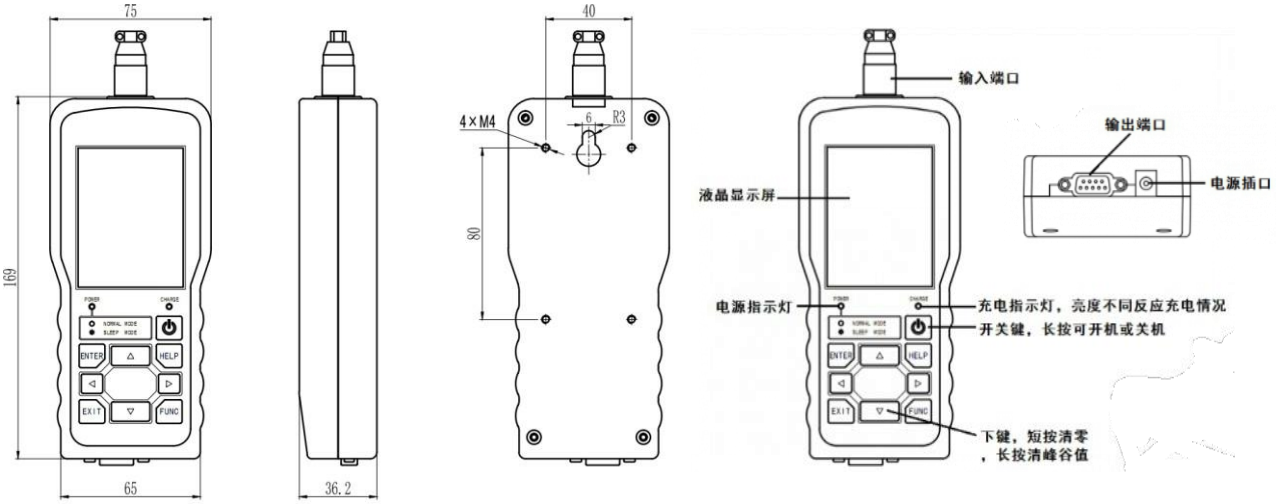
KDEV-B-7A



Product characteristics

- Please do not use in flammable, explosive gas places.
- There is a large capacity lithium batte inside the instrument. Do not tap it. Do not replace the internal batte by yourself.
- This manual is subject to change without notice and will be updated at any time. Please refer to the latest version. In case of doubt, please contact our company.
- The company shall not be liable for any direct or indirect loss other than the products themselves.
- Please use the matching power supply adapter power supply, otherwise it will cause circuit failure, and even cause spontaneous combustion.

Mounting dimensions



Technical parameters

(External power adapter)	**input**: Ac 90~260V, 50Hz or 6OHz **output**: DC 12V/2A, Internal positive and external negative interfaces. Attention: Do not use power adapters that are not compatible with this device	(Built-in batte)	The continuous usage time is about 18-36 hours, and the charging time is about 4-8 hours depending on the usage method。 Life not less than 1000 complete charging and discharging cycles
(Zero Adjustment Range)	-10~10 mV	(Conversion mode)	Sigma-Delta
(Gain input range)	1~12 mV	(Speed)	15、120、240、480、960、1920Times/second(Through parameter settings)
(Insulation Resistance)	≥100MΩ (500V DC MEGA benchmark) Not applicable when powered by built-in battery	(Non-linearity)	±0.01%F·S (measurement speed15Times/second)
(Insulation strength)	2000V AC(Test conditions: 50/60Hz, 1 minute) Not applicable when powered by built-in battery	(Gain Drift)	＜10ppm / ℃ (When connecting sensors, matching terminal connectors must be used, otherwise it will deteriorate the temperature drift characteristics.)
(Anti-inte erence)	IEC61000-4-2 (**Electrostatic Discharge**), Ⅲ rank IEC61000-4-4 (**Electric fast transient pulse group**), Ⅲ rank IEC61000-4-5 (surge), Ⅲ rank。Not applicable when powered by built-in battery	(Contact Input)	1 point external switch input, can be used for clearing, peeling, allowing alarms, displaying locks, clearing peak and valley values, etc. (can be selected through parameters)
(Protection level)	IP65(Front panel protection of the product)GB/T42-2008)	(Display accuracy)	1 / 100000
(Running environment)	ambient temperature: -30~60℃ (save: -40~65℃) ambient humidity: 35~85 % R·H, No condensation Installation position: Indoor, height＜2000m	(Supply Voltage)	Between PD+and PD -:+9V~+30V
		(Sensor power)	DC 5v±2%, 100mA (MAX)
(Input Signal)	Proportional measurement, equipped with 4-wire strain sensors-14 ~14mV	(Alarm output)	2-point OC gate output, ≤35mA
(Input sensitivity)	0.1uV/d	interface	MS1: RS232 interface, TC-ASCII And MODBUS/RTU protocol; Response time: 500 μ S (measured value)
(Alarm output)	V0: No built-in battery V1: Equipped with built-in battery		

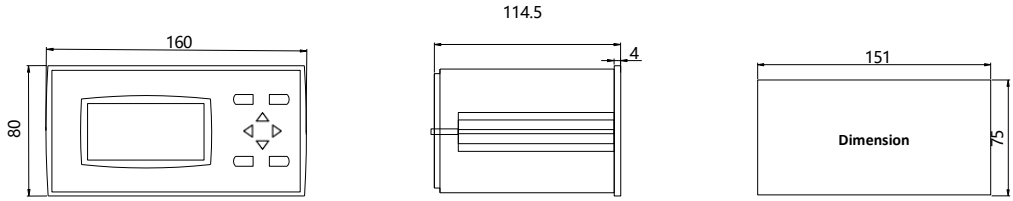


KDEV-B-9C

Product characteristics

- KDEV-B-9C is a set of torque, speed, power as one of the detection controller, forward and reverse maximum torque value recording, 4-point relay output, 64M historical data recording and U disk transfer recording function.

Mounting dimensions



Technical parameters			
(Supply Voltage)	220AC	(A/D resolution)	/
(Power consumption)	< 5W	(Switching output)	4 channels or one output with 232 printing
(Non-linear)	0.4~6mV/V	(sampling rate)	10，20，50Times/second
(Excitation voltage)	/	(Operating temperature)	-10~55℃
(Comprehensive accuracy)	≤±0.05%FS	(Driving capacity)	Single torque sensor
(Communication Protocol)	Modbus-RTU协议	(Contour dimension)	(See dimension diagram above)
(Baud rate)	2400、4800、9600、19200、38400、57600、115200	(Display accuracy)	/
(Material)	aluminum alloy	(Protection level)	Ip64
(Display Window)	Time date, torque, speed, power		
(Rated output)	RS232,RS485，4~20mA,0~20mA,0~±5V,0~±10V,4 **alarm point**		



KDEV-B-9D

Product characteristics

- 7″ /10.2″ TFT touch screen and force/control module integration, ultra-thin and light body. CORTEX-A8 processor, 600MHz main frequency, 128MB of memo ， 128MB of storage space.

- **Mounting dimensions**

	External dimensions W×H×D[mm]	Disk size W×H[mm]	Box size W×H[mm]	Disk opening size W1×H1[mm]
7"	226.5×163×36	226.5×163	213×150	215×152
10.2"	274×193×40	274×193	259×178	261×180



interface

Technical parameters			
(Supply Voltage)	DV24±20%V	(A/D resolution)	/
(Power consumption)	< 6W	(Switching output)	18 transistor outputs
(Non-linear)	1.0~2.5mV/V	(sampling rate)	≤3200Times/second
(Excitation voltage)	5VDC,250mA	(Operating temperature)	-30~60℃
(Comprehensive accuracy)	≤±0.02%FS	(Driving capacity)	Multiple force measurement signal interfaces, each interface can provide a maximum of Connect four 350Ω force sensors.
(Communication Protocol)	Modbus RTU Protocol and Free Agreement	(Contour dimension)	(See dimension diagram above)
(Transmission rate)	9600bps;19200bps; 115200bps	(Display accuracy)	-99,999~+999,999
(Material)	plastics	(Protection level)	Ip64
(Display Window)	16 bit color screen，800×480[7 "] or 1024×600[10.2 "]resolution ratio		
(Rated output)	7 definable normally open switch inputs, 4 definable analog signal outputs [AO]: 18 definable normally open transistor switch outputs, can be externally connected to the upper computer IPC/PLC and LED remote display. 0~10V/Max.50mA can be used to connect a USB mouse, download operating interface software from a USB drive, and backup data to a USB drive. 7 definable normally open switch inputs, 4 definable analog signal outputs [AO]: 18 definable normally open transistor switch outputs, can be externally connected to the upper computer IPC/PLC and LED remote display. 0~10V/Max.50mA can be used to connect a USB mouse, download operating interface software from a USB drive, and backup data to a USB drive.		



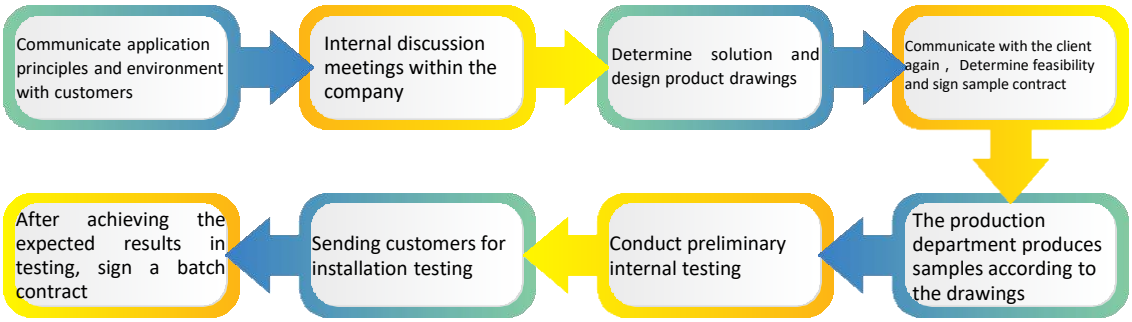
Non standard customization

characteristics

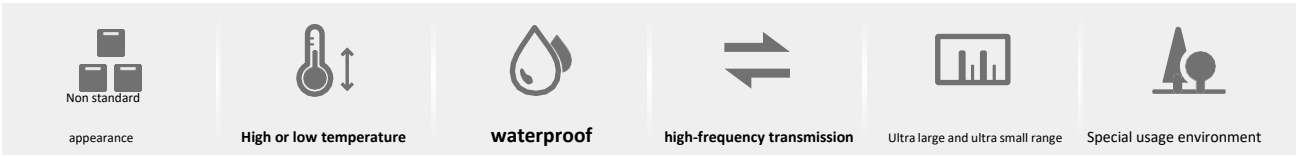
- The company has a strong design team, which can develop products according to the special requirements of customers;
- the development cycle is short , and the self- production line can be combined to produce products in a short time.

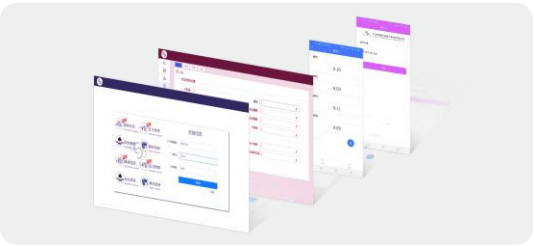
- **Production process**

Production process of non-standard products



- **Feasibility**





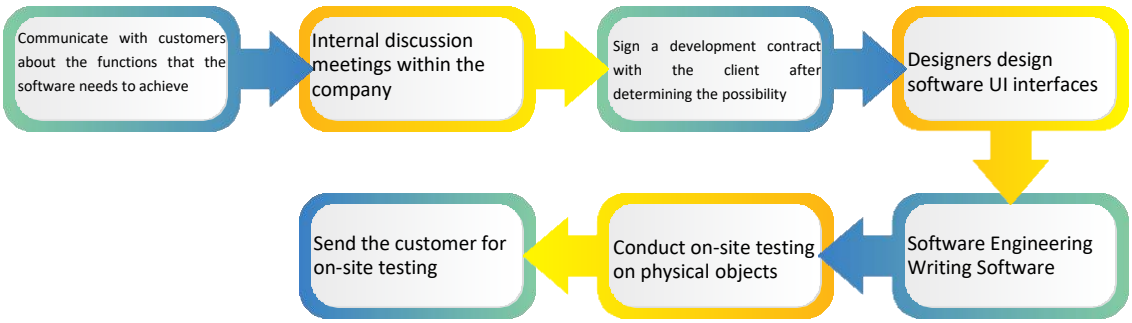
Software

Product characteristics

- The company has mature software development capabilities, according to customer needs, the development of special software, including software functions, inte ace design, data analysis and prese ation, wireless transmission, mobile applications. Regular cooperation units include: Research Institutes, university research, laboratories, special data requirements.

- **Production process**

software development process



- **Feasibility**

