

Instrument display instructions

TK.CB01

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1. Performance

1.1 speed display: average speed (AVG km/h) , maximum speed (MAXS km/h)

1.2 Mileage display: TRIP、ODO。

1.3 gear control: change from 0~5.

1.4 back light adjust.

1.5 kilometer/mile choose: according to customers need.

1.6 parameter setting: You can change a many parameter setting including gear wheel diameter, speed limit through communication lines in the computer.

1.7 Charging Status: providing stable charging status through optimization algorithm, resolved the problem that the power fluctuate with the start and stop of motor.

1.8 light perception headlight: through the change of light to open or close backlight of meter and headlight.

1.9 five-way button make customer convenient and fast.

1.10 assistant

1.11 Diagnostic Warning.

2. External dimension



The material is PC of product, liquid crystal display (LCD) is acrylic with high hardness.

3. Skills specification

voltage	36V
Status current	10mA
Maximum current	30mA
electric leakage	<1 μm
trial temperature	-18~60°C
Storage temperature	-30~60°C
IP	IP65
Storage humidity	30%-70%
Test identification	CE/ROSH/EN15194/REACH

4. Display interface




4.1 USB: Using USB to charge your phone .

4.2 speed: display number, km/h or mile/h.

4.3assistant: Display in assistant model.

4.4 headlight: Display when headlight s and backlights are on.

4.5power display : Current battery is display.

4.6fault indication: When have malfunctions the mark  display.

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4.7speed unit: You can convert kilogram and mile.

4.8 gear display: Current booster position from 0 to 5, when display number 0 is neutral gear, the assistant gear is from 1 to 5.

4.9 Mileage display: TRIP, ODO.

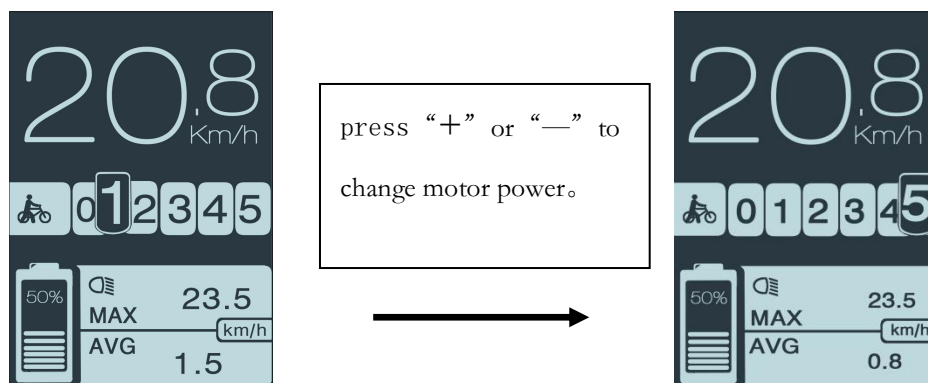
4.10Mileage display: According to the model is designed. Which display the massage of mileage.


5. Operation instruction

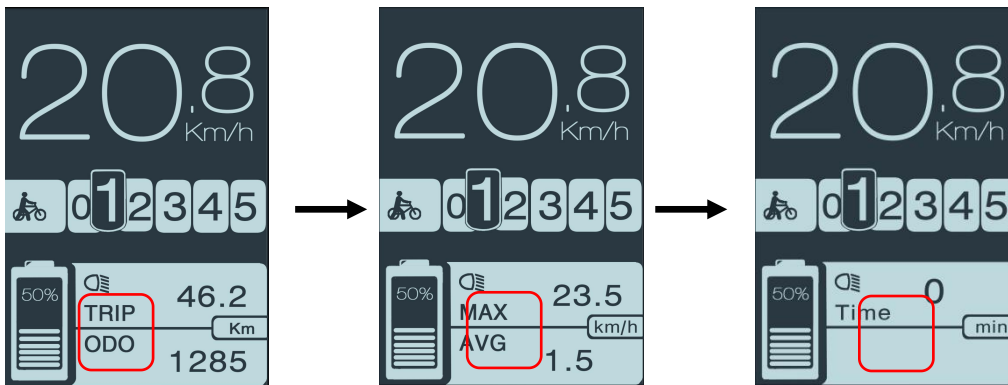




5.1. power switch: press button for 2 seconds to open meter, press 3 seconds to down meter. If you do not operation meter in 5 minutes it can be closed.

5.2. assistment gear choice: button “+” or “—”, can change power-assistant gear, and change motor power, lowest is 1, maximum is 5, the default number is 1 when the meter is turned on, and it is neutral when the number 0 is displayed.




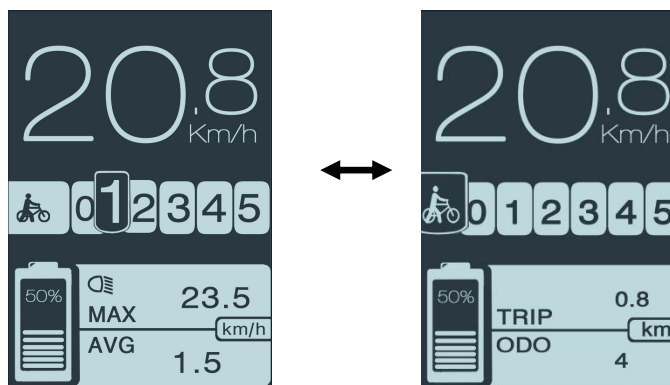
5.3. change model : button  can change the massage of milage, speed and time. , cycle display mileage (TRIP/ODO) → speed (MAX/ AVG km/h) → time (Time--min)



5.4 light switch: button  can turn on light, and again button  can close it.



5.5 auxiliary forces model: e-bike began to assistant after button 2 seconds. And gear displaying , release “---” e-bike exit promotion model. (only in the state of assistment)



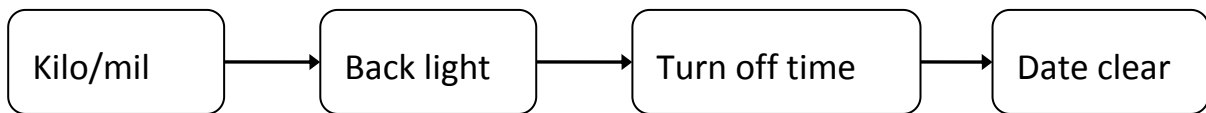
5.6 power display: When the battery is fully charged, the 10-segment LCD of the battery is displayed according to the actual power and the outer frame is lit. When the battery is exhausted, the battery's 10-segment LCD is completely off and the outer frame is flashing, requiring immediate charging. The battery level (C) shows the correspondence table



Power	percentage	power	percentage	power	Percentage
10	$\geq 90\%$	6	$50\% \leq C < 60\%$	2	$15\% \leq C < 25\%$
9	$80\% \leq C < 90\%$	5	$45\% \leq C < 50\%$	1	$5\% \leq C < 15\%$
8	$70\% \leq C < 80\%$	4	$35\% \leq C < 45\%$	flash	$C < 5\%$
7	$60\% \leq C < 70\%$	3	$25\% \leq C < 35\%$		

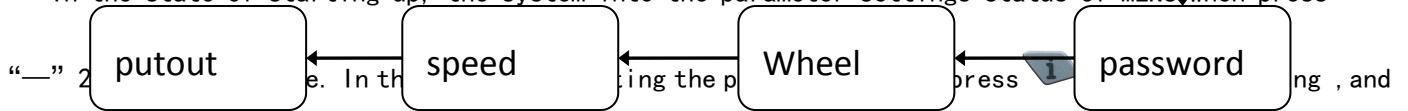
6. user setting

6.1 setting project

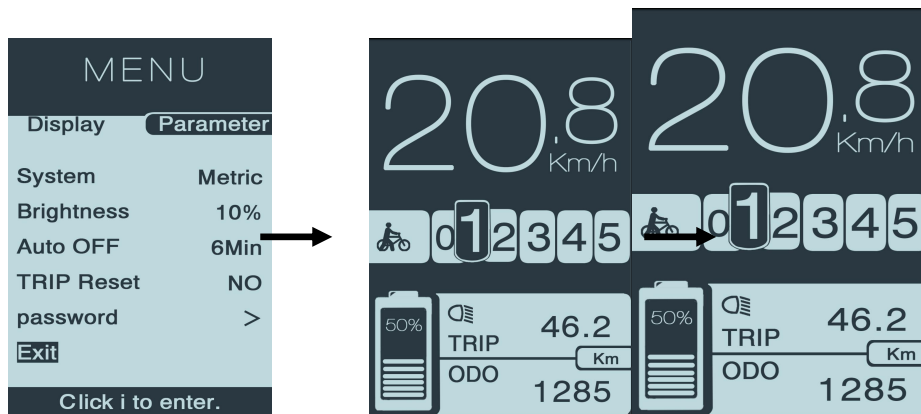


6.2 preparation before setting

In the state of starting up, the system into the parameter settings status of MENU when press “+”



then press “—” to choose EXIT, last press can return to the initial statue.

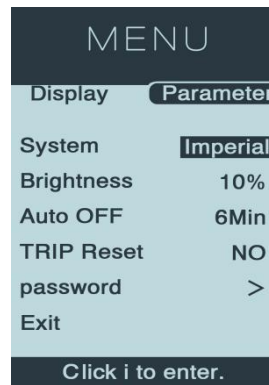
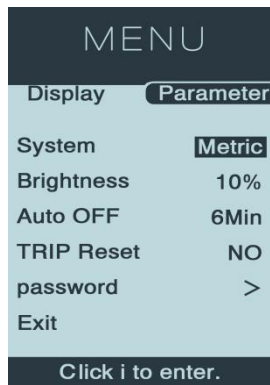
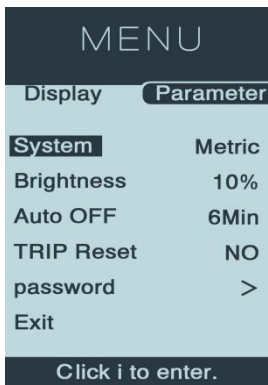


In the state of parameter setting, press “+” or “—” to setting, after choose complete, press return to the initial states. and press “—” again change to next project.

Note: in the state of parameter setting, if you do not operation in 10s, ridding can turn bake t o the ridding state (and parameter can't store)

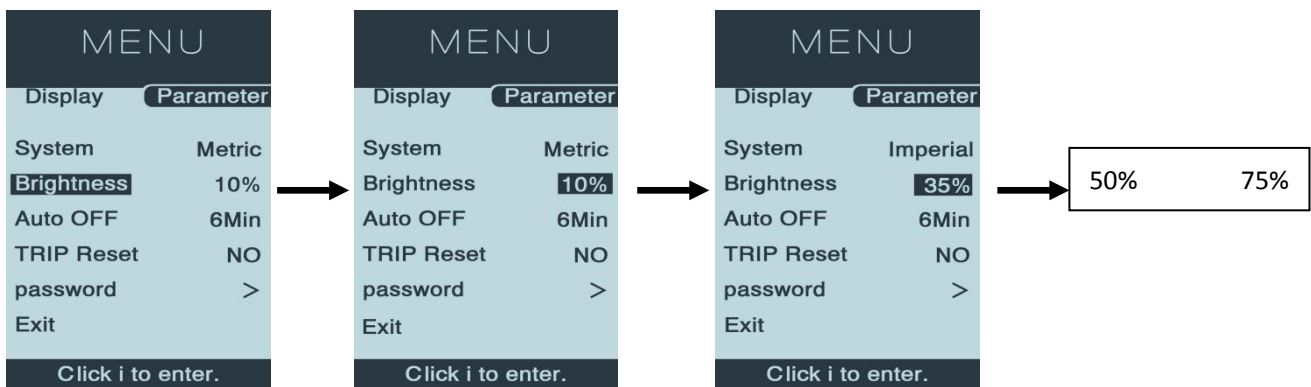
metric/mileage: the system in to the state of MENU, press to choose install, press again to

Metric and then press “+” or “—” can change to Imperial, and again turn bake to the install system.



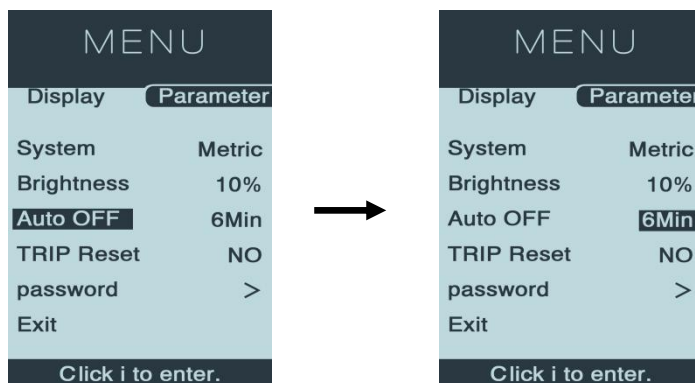
6.3 brightness:

Press “—” choose setting item Brightness, press to the light point. and then press “+” or “—” change display 100%、75%、50%、35%、10%。(100%maximun light, 10%minum lihght), press again return to thesetting Brightness.



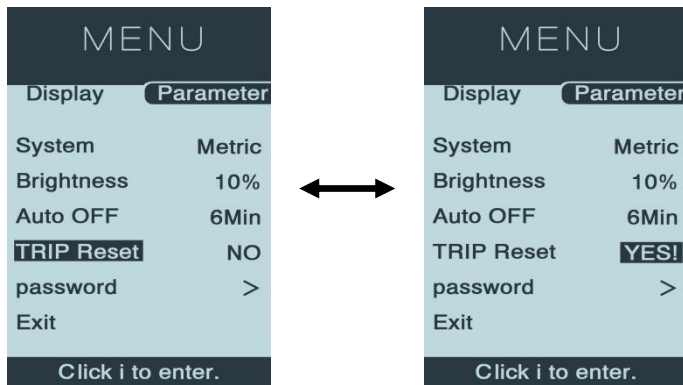
6.4 automatic shutdown time setting:

press “—” , choose Auto OFF, and press to time and press “+” “—” choose automatic shutdown time setting ,press again return to setting Auto OFF.



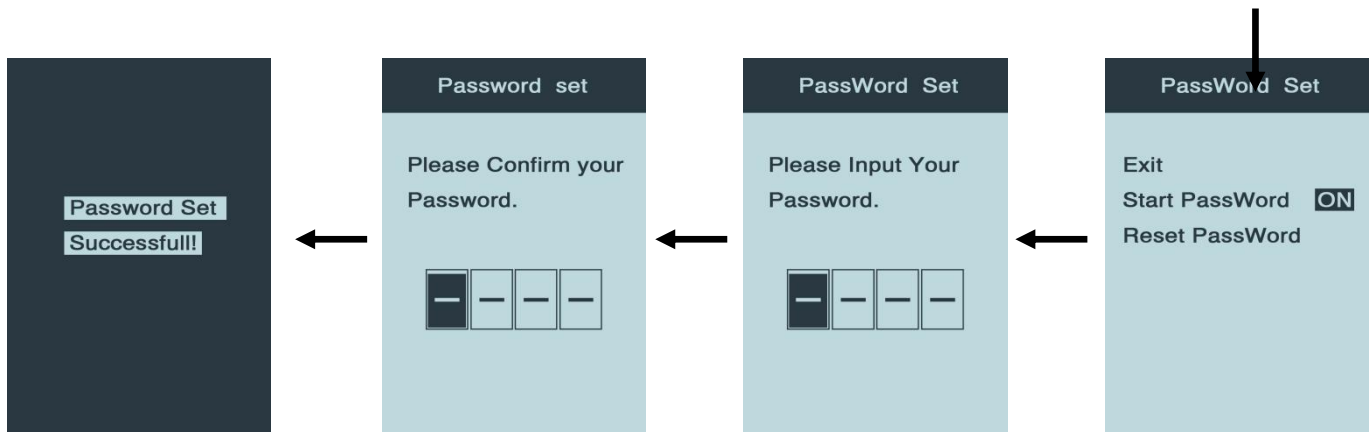
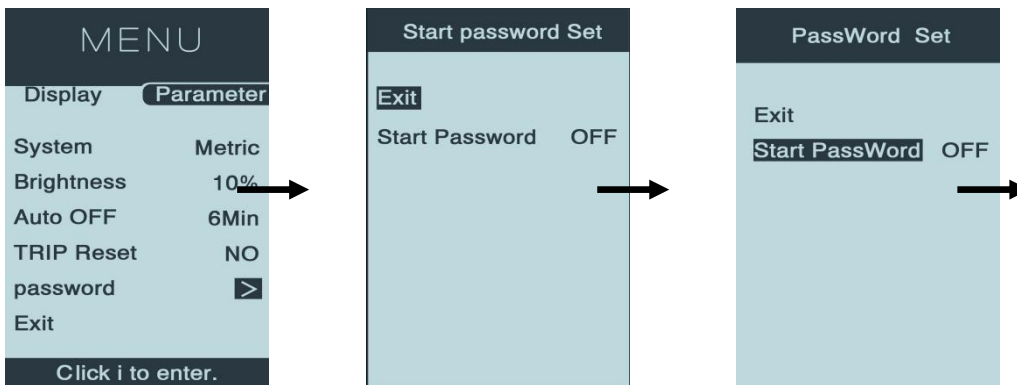
6.5date clean:

press “—” choose TRIP Reset, and press to YES” or “NO” press+” “—” to decide whether need date clean, and then press return to TRIP Reset.




6.6 power on password:

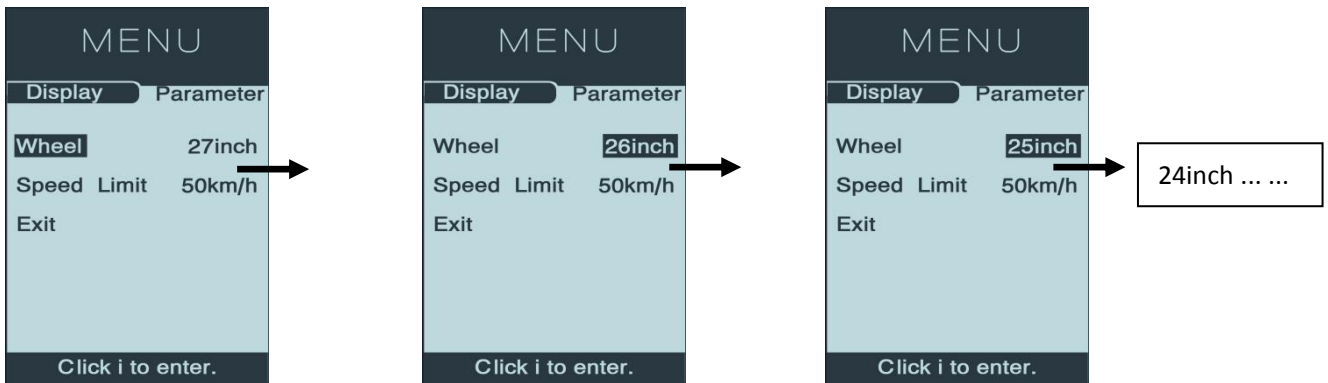
press “—” choose Password and press move cursor at “>” into another page, default option choose Exit; and press “—” choose Start Password , press move to default option “OFF” press “—” choose reset password and press into setting password page put into password , and then press into passwordonfirm password and press comtrue password setting. (import password:press “—” or “+” input number, press to confirm.)




6.7 wheel diameter selection.

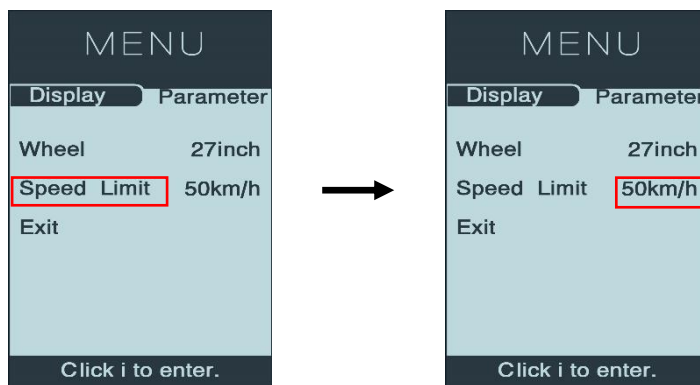
Press “—” choose setting wheel , and then press move parameter corsur , press “+” “—” to change

from 27Inch、 26 Inch、 25 Inch、 24 Inch... and press  return to wheel. (note :wrong wheel choose wrong speed.)




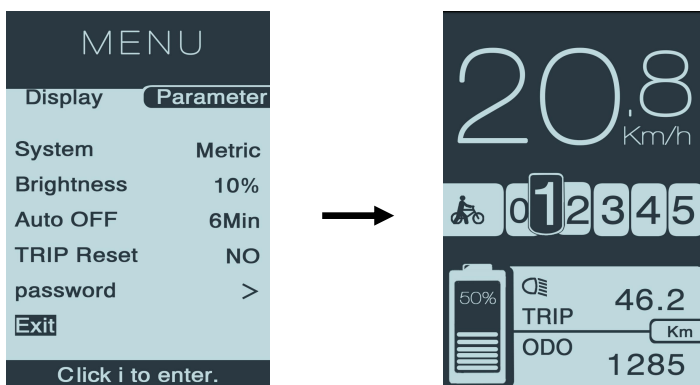
6.8 speed limit adjustment:

Press “—” choose Speed limit, and press  move cursor choice and press “+” “—” to adjust speed limit values. minimum is 12km/h, maximum is 60km/h.




6.9 Exit

When you completed all of above press “+” or “—” to move cursor to Exit and then press .



7. error code definition

The LCD screen will display  when the whole vehicle has failed. The error is display at the speed display

position. the error code comparison table is as follow .



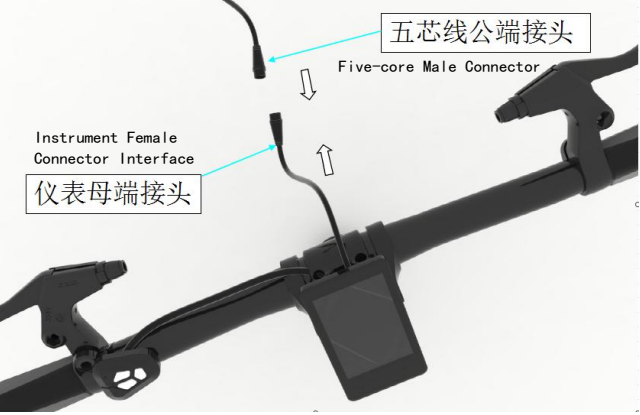
Error code	Instruction	Solution
Display "03"	brake	Check if the brake wire is stuck
Display "04"	The speed have no place	Check speed whether homing
Display "05"	Speed control failure	Check speed control
Display "06"	Low voltage protection	Check battery voltage
Display "07"	Over voltage protection	Check battery voltage
Display "08"	The failure of hall signal of motor	Check motor parts
Display "09"	Motor phase line fault	Check motor parts
display "11"	Controller temperature sensor fault	Check controller
Display "12"	Current sensor failure	Check controller
Display "13"	Battery temperature failure	Check battery
Display "21"	Speed sensor failure	Check the place of speed sensor
Display "22"	BMS communication failure	Change battery
Display "30"	Communication failure	Check controller piugin

8. HMI install

8.1 installation display on handlebar

Step	Schematic	Zero/component
<p>1. Open the two instrument handles on the left and right sides of the instrument, and then insert the rubber clip into the correct position of the wrist as shown. (According to the diameter of the tube, you can choose whether you need rubber collar and model (applicable to tube handle specifications: $\Phi 22.2$, $\Phi 25.4$, $\Phi 31.8$))</p>		<p>Rubber collar $\Phi 22.2$, $\Phi 25.4$</p>
<p>2. Fit the left and right wrists and rubber collars on the handlebars. Use an Allen key to secure and tighten the handlebar fixing screws. Locking torque: 1N.m</p>		<p>HMI wrist Allen wrench screw M4*8 Tool: 3mm Allen wrench</p>
<p>3. Adjust the meter angle to make it easier to see the meter screen while riding. After determining the angle, tighten the screws to the specified torque.</p>		

8.2 Installation auxiliary switch

step	Schematic	Zero/component
<p>1. Open the wrist opening from the auxiliary switch and put it in the position where the handlebar is properly operated. Adjust the angle of the auxiliary switch to make it easier to see the switch and easy to operate when riding. (Applicable to the tube with the outer diameter $\Phi 22.2\text{mm}$)</p>		<p>wrest</p>
<p>2. Secure and tighten the handlebar fixing screws with an Allen key Locking torque: 1N.m</p>		<p>Hexagon socket head cap screw M3*8 Tool: 2.5mm hex wrench</p>
<p>3 Connect the meter plug-in to the five-wire connector of the integrated harness as indicated.</p>		

9. System material details

component	material	quality	specification
HMI	meter	1	
	Φ22.2rubber collar	2	Φ22.2
	Hexagon socket head screw	1	M3*8
	Hexagon socket head screw	2	M4*8
	Front cable	1	According to order
	Rear cable	1	According to order