

ETM™ Energy Meter A-EX3



PRODUCT INTRODUCTION

The energy meter A-EX3 is specially designed for central air conditioning systems to do cooling and heating measurement. It could measure and charge for cooling and heating.

The energy consumed by the user is calculated by measuring the temperature and flow rate of the chilled water (or hot water) flowing through the pipe.

Install an energy meter A-EX3 on the user's inlet pipe and install a temperature sensor on each of the inlet and outlet pipes. The energy is calculated by metering the amount of chilled water (or hot water) flowing through the pipe (ie, the flow rate and pipe size), and the temperature difference between the incoming and return water.

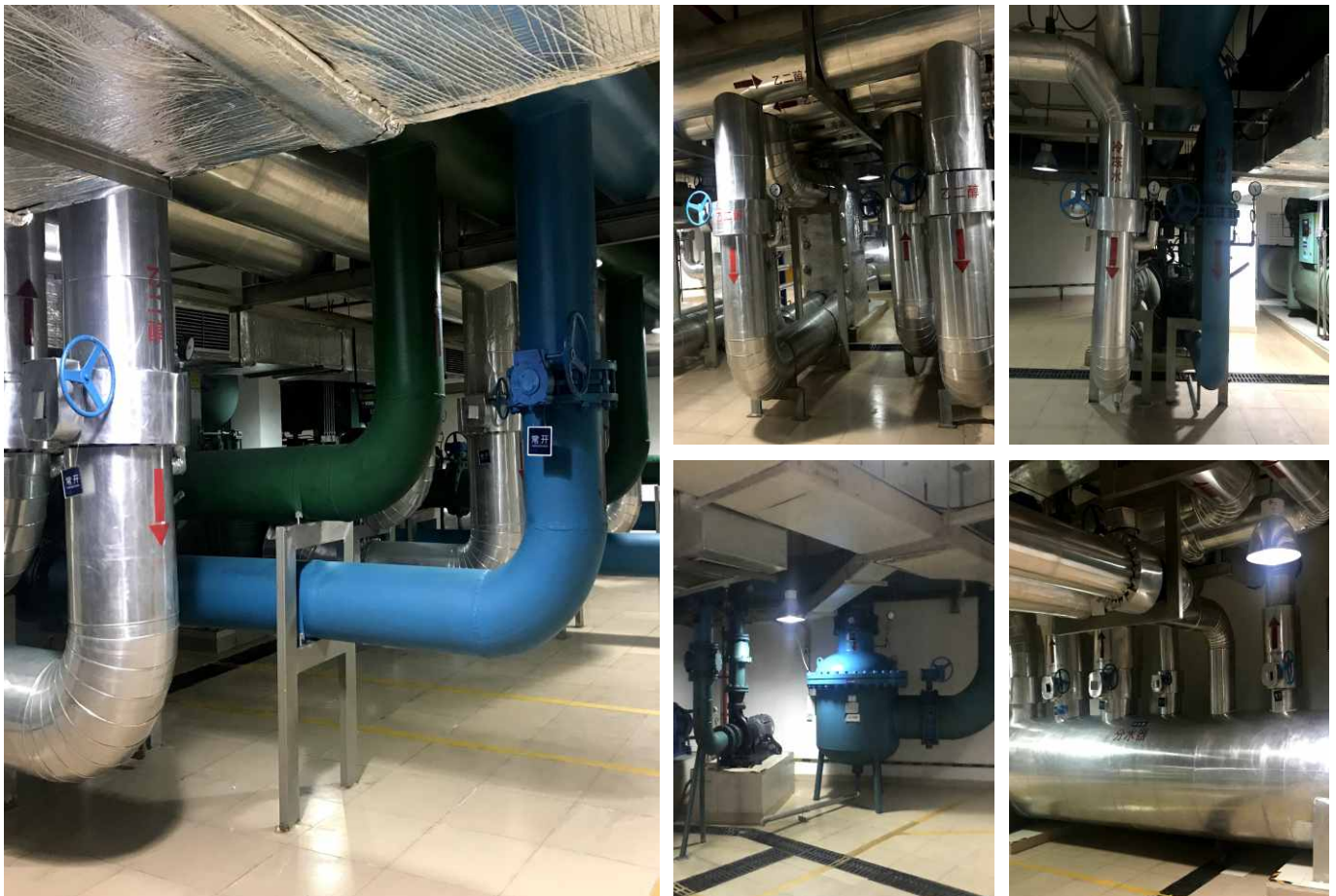


Features

- High-quality aluminum alloy case with good mechanical strength and beautiful appearance.
- PT1000 high-precision temperature sensor with a precision measuring circuit to ensure high-precision temperature measurement.
- Clamp on type, no need to cut or change the pipe;
- No special knowledge is required. installation and measurement can be done according to the operating instructions.
- No moving parts, no pressure loss, no need to stop production during the installation and measurement.

APPLICATION

The energy meter A-EX3 is widely used in central air conditioning, heating, paper and pulp, food and medicine, chemical, flow inspection, flow tracking and collection.



COMPONENT PARTS



ETM™



Temperature sensor



Connecting cable



Flow Transducer



Temperature sensor upper bracket



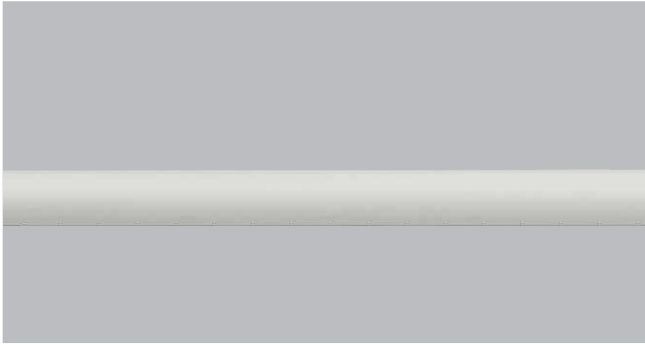
Temperature sensor base bracket

PIPING SPECIFICATION

Model	A-EX3-DN15	A-EX3-DN20	A-EX3-DN25	A-EX3-DN32	A-EX3-DN40	A-EX3-DN50
Nominal pipe diameter DN	15mm	20mm	25mm	32mm	40mm	50mm
Pipe OD	20mm	25mm	32mm	40mm	50mm	63mm
Pipe ID	15mm	19mm	26mm	33mm	43mm	55mm
Wall thickness	2.5mm	3mm	3mm	3.5mm	3.5mm	4mm

INSTALLATION STEPS

01 Clean the pipe



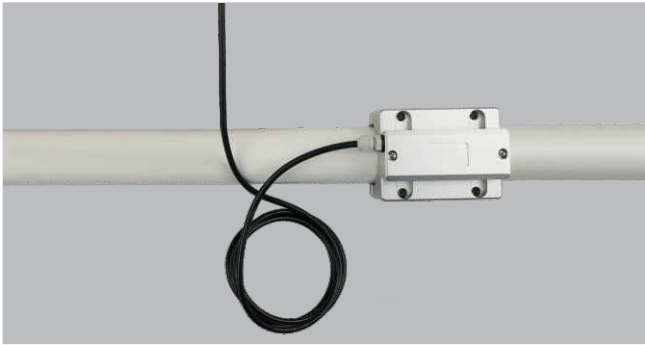
No dirt, paint, or debris on the surface of the pipe.

02 Install the bracket



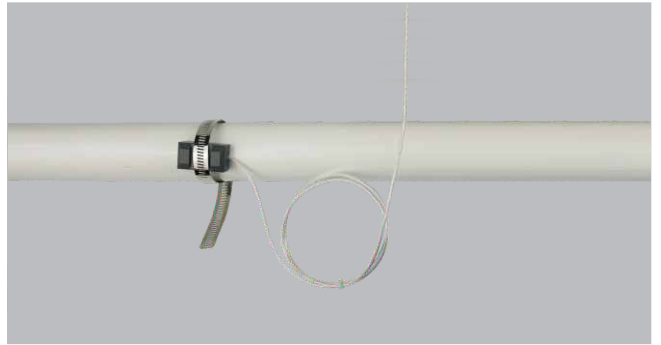
Install screw on the top part of the bracket, the bottom part of the bracket will automatically connect with the top part. Tighten the screws.

03 Install the flow transducer



Install the flow transducer on the upper bracket and tighten the screws.

04 Install the temperature sensor



Install the temperature sensor upper bracket and base bracket on the pipe and tighten the screws.

05 Run the ETM™ Energy Meter

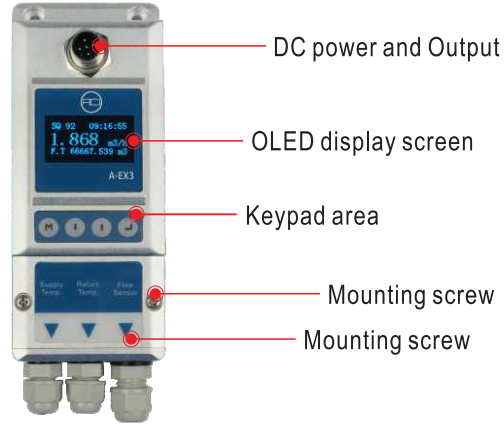


Please refer the manual for cable connection; Power on and see if the $SQ \geq 50$ which indicates that the measurement has been stable. Wrap the insulation layer and complete the installation.

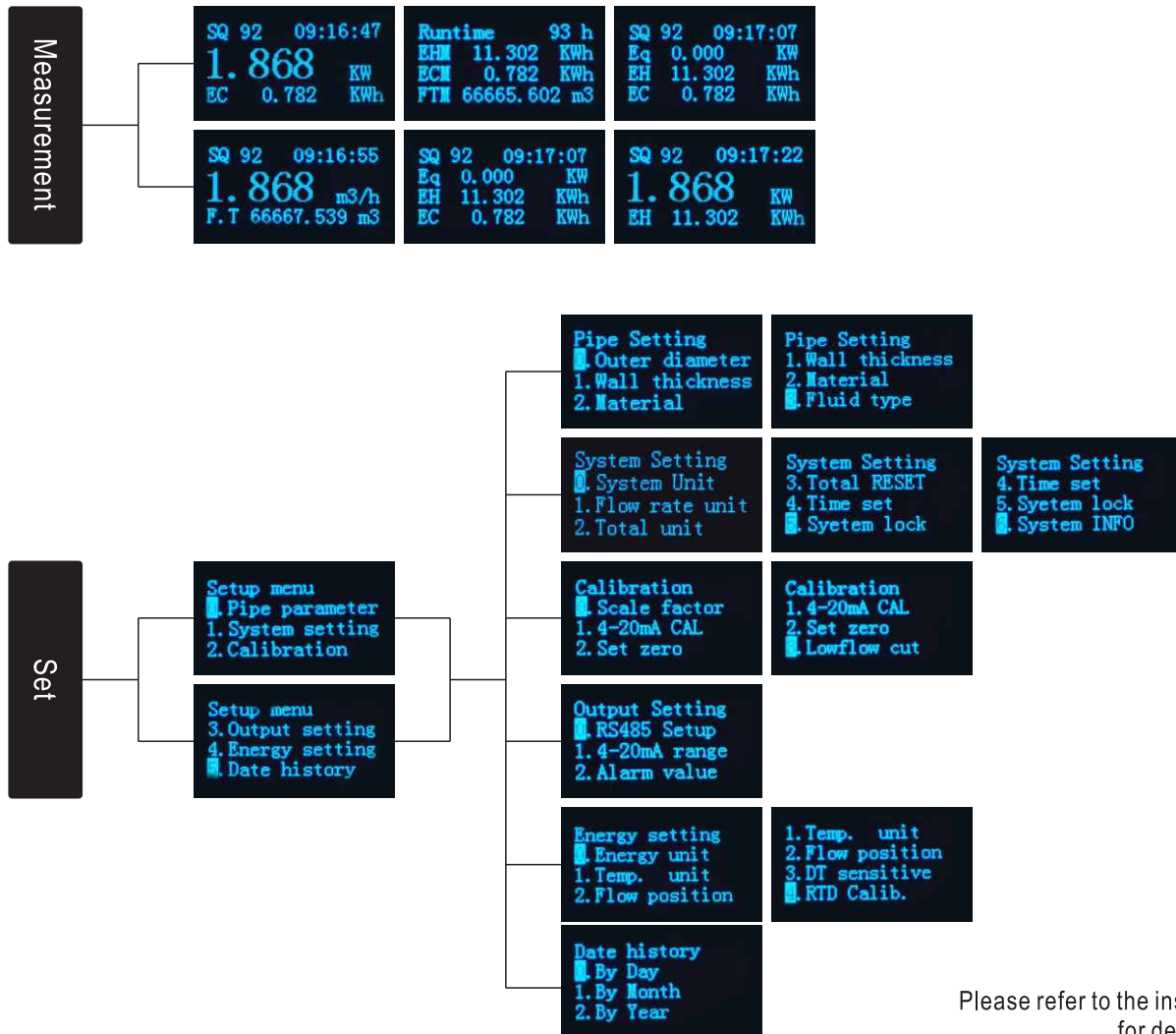
ETM™ SETTING

Special instructions:

ETM™, which is designed for different pipe diameter and materials, will be set in standard setting before it leaves the factory. There is no need to reset.




DISPLAY MENU



Please refer to the instruction manual for detailed operation.

PERFORMANCE INDEX

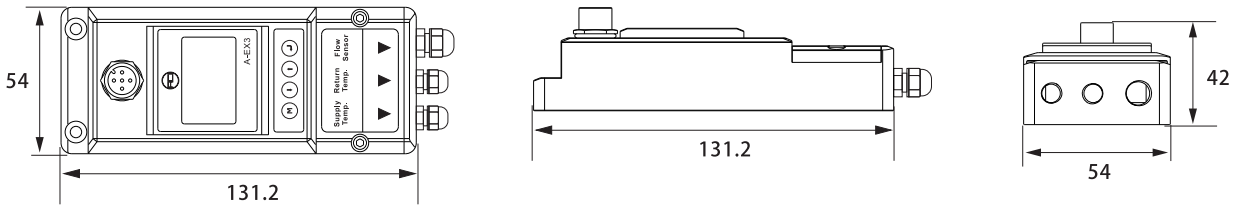
Product	ETM™ Energy Meter					
Model	A-EX3					
Flow range	0.1 m/s ~ 5.0 m/s					
Accuracy	±2.0%					
Repeatability	0.8%					
Pipe size	DN15, DN20, DN25, DN32, DN40, DN50					
Data storage	Daily, monthly, and Annual. Flow Totalizer					
Analog output	4~20mA, Maximum load: 600Ω					
Alarm output	OCT, Upper and lower limit alarm function (optional)					
Communication	RS485, (MODBUS or MeterBUS optional)					
Power supply	24 VDC					
Cable length	1.8m					
Keypad	Four light touch buttons					
Screen	OLED 128*64 display screen					
Units	Metric and imperial units are available, Cubic Meters(m3), Liters(L), USA Gallons(GAL)/hour, /min, Default unit setting: m3/h					
Totalizer	Six digit					
Piper material	Stainless steel pipe, carbon steel pipe, PVC					
Case material	Aluminum alloy					
Environment temp.	0°C - 50°C					
RTD measuring temp.	2°C - 105°C					
Medium temp.	0°C - 50°C					
Environment humidity	0-95% relative humidity, without condensation					
IP Grade	IP54					

Weight (KG)	DN15	DN20	DN25	DN32	DN40	DN50
	0.76	0.78	0.81	0.86	0.90	0.91

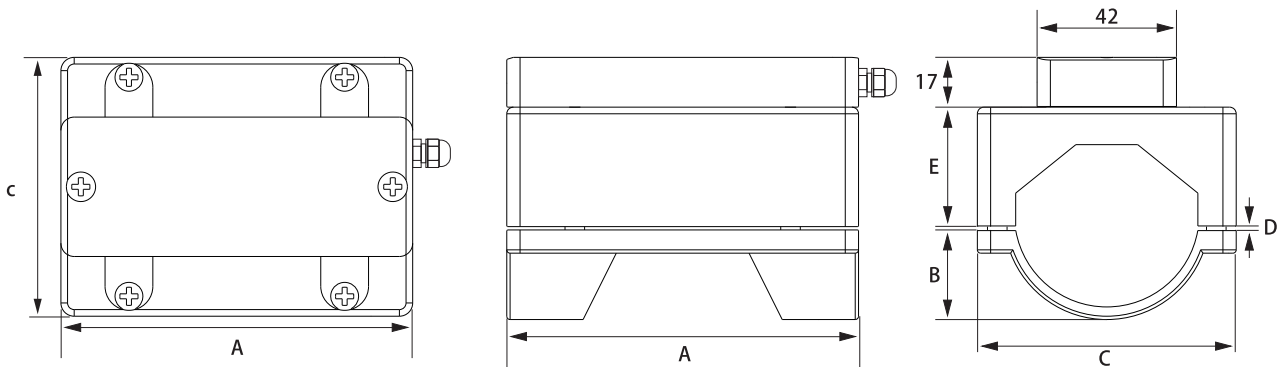
DIMENSIONS

Model	A (mm)	B (mm)	C (mm)	D(mm)	
				min	max
A-EX3-DN15	25	8	58	1.5/ \varnothing 20	8/ \varnothing 23
A-EX3-DN20	25	15	58	1.5/ \varnothing 25	4.5/ \varnothing 28
A-EX3-DN25	28.5	18.5	58	1.5/ \varnothing 32	4.5/ \varnothing 35
A-EX3-DN32	29.5	24	68	1.5/ \varnothing 38	8.5/ \varnothing 45
A-EX3-DN40	36	27	78	1.5/ \varnothing 48	7.5/ \varnothing 54
A-EX3-DN50	41	32	91	1.5/ \varnothing 58	7.5/ \varnothing 64

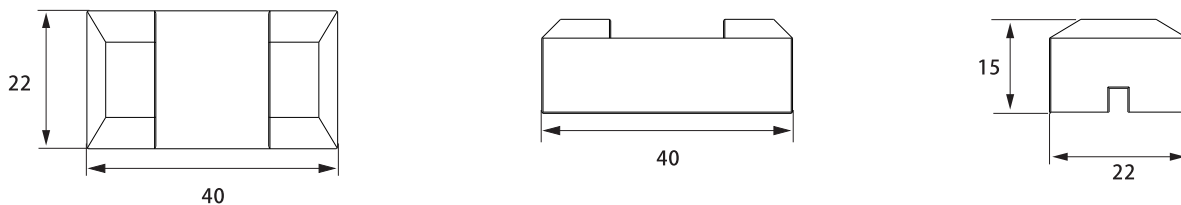
A-EX3 Unit dimensions

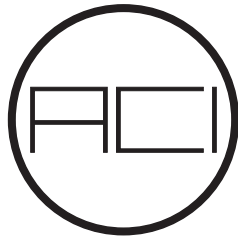


Flow transducer dimensions



Temp. sensor dimensions





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