

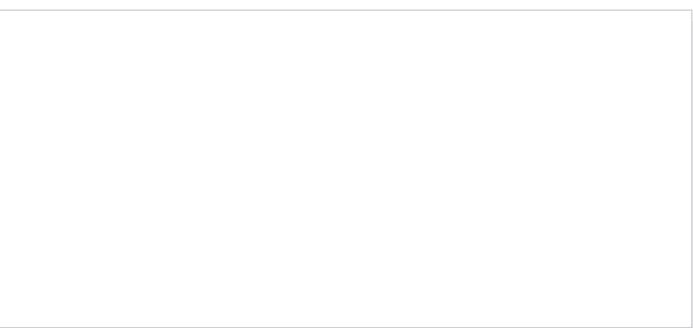


• AST420 SIGNAL CONVERTER	• ACA50 MULTI-FUNCTION CALIBRATOR	• AUT8500 ULTRASONIC THICKNESS GAUGE	• APT3000 PRESSURE TRANSMITTER
• AFC365 FLOW COMPUTER	• AVH400 2/3/5-VALVE MANIFOLDS	• ATT1000 SMART TEMPERATURE TRANSMITTER	• AHT520 • AHT530 SMART HART COMMUNICATOR
• ARC800 PAPERLESS RECORDER	• ARC900 PAPERLESS RECORDER	• ARC1000 PAPERLESS RECORDER	• AUL730 ULTRASONIC LEVEL TRANSMITTER



ALIA TECHNOLOGY LLC
FLOWMETER ►

Agents



ELECTROMAGNETIC / ULTRASONIC / VORTEX / ROTAMETER
THERMAL MASS / CORIOLIS MASS / SMART TARGET
POSITIVE DISPLACEMENT / SWIRL / D/P

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ALIAMAG

ELECTROMAGNETIC FLOWMETER ▶

CONVERTER FOR ELECTROMAGNETIC FLOWMETER ▶



MODEL	PARAMETER	MODEL	PARAMETER
AMF900	<ul style="list-style-type: none"> Application: Liquid (Conductivity more than 5 $\mu\text{S}/\text{cm}$) Accuracy: +/-0.2% or +/-0.4% of reading (Velocity $\geq 0.5 \text{ m/s}$) Process Connection: Flange Type (ANSI, DIN, JIS) Size: 3/8"-80" Liner: Polyurethane, Neoprene, FEP, PFA, PTFE Electrode: S.S. 316L, Has. B, Has. C, Titanium, Tantalum, Platinum, Tungsten Carbide Temperature: -40~180 °C (Dependent on size and liner) Explosion Proof: Ex d ia [ia] q IIC T6 Protection Class: IP67 / IP68 	AMC2100	<ul style="list-style-type: none"> Application: Paired with ALIA AMF Sensor Excitation: DC Pulsed Accuracy: +/-0.4% of reading (Velocity $\geq 0.5 \text{ m/s}$) Output: 4-20 mA, Pulse, Alarm Communication: RS485 (MODBUS), HART Self Diagnosis: Error messages are displayed if failure occurs Protection Class: IP65 Power Supply: 90-260 VAC or 24 VDC +/-10% Ambient Temperature: -25~65 °C Mounting: Wall mounting or Bracket on 2" pipe
AMF500	<ul style="list-style-type: none"> Application: Liquid (Conductivity more than 5 $\mu\text{S}/\text{cm}$) Accuracy: +/-0.2% or +/-0.4% of reading (Velocity $\geq 0.5 \text{ m/s}$) Process Connection: Wafer Type Size: 1"-8" Liner: FEP, PTFE Electrode: S.S. 316L, Has. B, Has. C, Titanium, Tantalum, Platinum, Tungsten Carbide Temperature: -40~180 °C Explosion Proof: Ex d ia [ia] q IIC T6 Protection Class: IP67 / IP68 Max. Pressure: 16 kgf/cm² (Standard), 40 kgf/cm² (Option) 	AMC2200	<ul style="list-style-type: none"> Application: Paired with ALIA AMF Sensor Excitation: DC Pulsed Accuracy: +/-0.35% of reading (Velocity $\geq 0.5 \text{ m/s}$) Output: 4-20 mA, Pulse, Alarm Communication: RS485 (MODBUS), HART, Bluetooth Self Diagnosis: Error messages are displayed if failure occurs Protection Class: IP65 Power Supply: 90-260 VAC or 24 VDC +/-10% Ambient Temperature: -25~65 °C Mounting: Wall mounting
AMF301	<ul style="list-style-type: none"> Application: Liquid (Conductivity more than 5 $\mu\text{S}/\text{cm}$) Accuracy: +/-0.2% or +/-0.4% of reading (Velocity $\geq 0.5 \text{ m/s}$) Process Connection: Thread, BSPP Size: 1/8"~1-1/2" Liner: FEP / PU Electrode: S.S. 316L, Has. B, Has. C, Titanium, Tantalum, Platinum Temperature: -20~120 °C Explosion Proof: Ex d ia [ia] q IIC T6 Protection Class: IP67 / IP68 Max. Pressure: 16 kgf/cm² 	AMC3200	<ul style="list-style-type: none"> Application: Paired with ALIA AMF Sensor Excitation: DC Pulsed Accuracy: +/-0.2% of reading (Velocity $\geq 0.5 \text{ m/s}$) Output: 4-20 mA, Pulse, Alarm Communication: RS485 (MODBUS), HART, Bluetooth Self Diagnosis: Error messages are displayed if failure occurs Protection Class: IP67 Explosion Proof: Ex d ia [ia] q IIC T6 Power Supply: 90-260 VAC or 24 VDC +/-10% Ambient Temperature: -25~65 °C Mounting: Wall mounting or Bracket on 2" pipe
AMF601	<ul style="list-style-type: none"> Application: Liquid (Conductivity more than 5 $\mu\text{S}/\text{cm}$) Accuracy: +/-0.2% or +/-0.4% of reading (Velocity $\geq 0.5 \text{ m/s}$) Process Connection: IDF Tri-Clamp / Union Screw Size: 3/8"-3" Liner: FEP Electrode: S.S. 316L, Has. B, Has. C, Titanium, Tantalum, Platinum Temperature: -40~150 °C Explosion Proof: Ex d ia [ia] q IIC T6 Protection Class: IP67 / IP68 Max. Pressure: 10 kgf/cm² 	AMC3200E	<ul style="list-style-type: none"> Application: Paired with ALIA AMF Sensor Thermal Energy measurement function Excitation: DC Pulsed Accuracy: +/-0.2% of reading (Velocity $\geq 0.5 \text{ m/s}$) Output: 4-20 mA, Pulse Communication: RS485 (MODBUS), Bluetooth, BACnet Self Diagnosis: Error messages are displayed if failure occurs Protection Class: IP67 Temperature Input: PT1000, 2 wires Power Supply: 90-260 VAC or 24 VDC +/-10% Ambient Temperature: -25~65 °C Mounting: Wall mounting or Bracket on 2" pipe
AMF100	<ul style="list-style-type: none"> Application: Liquid (Conductivity more than 10 $\mu\text{S}/\text{cm}$) Accuracy: +/-2% of reading (Velocity $\geq 0.5 \text{ m/s}$) Process Connection: Threaded, M60 / 2" BSPP / Flange (ANSI, JIS, DIN) Size: 6"-240" Electrode: S.S. 316L Protection Tube: S.S. 316 Cap: PTFE Temperature: -10~80 °C Explosion Proof: Ex d ia [ia] q IIC T6 Protection Class: IP67 / IP68 Max. Pressure: 10 kgf/cm² Installation: Direct insert to the pipe or Hot-Tap 	AMC4000	<ul style="list-style-type: none"> Application: Paired with ALIA AMF Sensor Excitation: DC Pulsed Accuracy: +/-0.3% of reading (Velocity $\geq 0.5 \text{ m/s}$) Output: Pulse Communication: RS485 (MODBUS) Self Diagnosis: Error messages are displayed if failure occurs Protection Class: IP67 Power Supply: 3.6V battery, Size D Ambient Temperature: -25~65 °C Mounting: Wall mounting or Bracket on 2" pipe

ALIASONIC

ULTRASONIC FLOWMETER



AUF610



AUF750

- Measuring Principle: Transit time difference
- Application: Liquid
- Max. Viscosity: < 100 cP
- Accuracy: +/-1% ~ +/-2% of reading
+/-0.5% of reading (Online calibration)
- Size: 1/2"-240"
- Connection: Clamp-on
- Output: RS232
- Alarm: High / Low with buzzer
- Protection: IP65
- Temperature: -40~160 °C
- Power Supply: Ni-MH Battery
- Charger: 90-260 VAC, 8-12 Hr charging

- Measuring Principle: Transit time difference
- Application: Liquid
- Max. Viscosity: < 100 cP
- Accuracy: +/-1% ~ +/-2% of reading
+/-0.5% of reading (Online calibration)
- Size: 1/2"-240"
- Connection: Clamp-on
- Output: Pulse, 4-20 mA
- Temperature Input: PT1000 for BTU calculation
- Alarm: High / Low with buzzer
- Communication: RS485 (MODBUS)
- Protection: IP65, Sensor: IP68
- Temperature: -40~160 °C
- Power Supply: 85-265 VAC or 8-36 VDC
- Mounting: Wall mounting



AUF760



AUF770

- Measuring Principle: Transit time difference
- Application: Liquid
- Max. Viscosity: < 100 cP
- Accuracy: +/-1.0% of reading
- Size: 4"-40"
- Material: CS, S.S. 304, S.S. 316
- Process Connection: Flange Type (ANSI, DIN, JIS)
- Output: Pulse, 4-20 mA
- Temperature Input: PT1000 for BTU calculation
- Alarm: High / Low with buzzer
- Communication: RS485 (MODBUS)
- Protection: IP65, Sensor: IP68
- Temperature: -20~110 °C
- Power Supply: 85-265 VAC or 8-36 VDC
- Mounting: Wall mounting

- Measuring Principle: Transit time difference
- Application: Liquid
- Max. Viscosity: < 100 cP
- Accuracy: +/-0.5% of reading
- Size: 1"-8"
- Material: S.S. 304, S.S. 316, S.S. 316L
- Process Connection: IDF Tri-Clamp or Screw Union
- Max. Pressure: 1.0 MPa
- Output: Pulse, 4-20 mA
- Alarm: High / Low with buzzer
- Communication: RS485 (MODBUS)
- Protection: IP65, Sensor: IP67
- Temperature: -40~160 °C
- Power Supply: 85-265 VAC or 8-36 VDC
- Mounting: Wall mounting

ULTRASONIC OPEN CHANNEL FLOWMETER ▶

AUF790



- Level: 0-3 m
- Dead Band: 0.35 m Max.
- Accuracy: +/-0.25% of Full Scale
- Sensor Frequency: 40 kHz / 1 kHz
- Beam Angle: 6°
- Formula: V-notch, Parshall, Palmer-Bowlus, Rectangular, Cipolletti, Leopold-Lagco
- Ambient Temperature: -20~60 °C
- Temp. Compensation: Built-in to compensate over temperature range

- Mounting: G2" / Flange end
- Power Supply: 90-260 VAC and 18-36 VDC
- Output: 4-20 mA, Alarm
- Communication: RS485 (MODBUS)
- Protection: IP65 (ABS) / IP67 (Aluminum Alloy)
- Explosion Proof: Ex d (ia) IIB T4

- Application: Gauge Pressure, Absolute Pressure, Vacuum
- Measuring Range: 0-10 kPa~0-30 kPa (Min.)
0-32 MPa~0-70 MPa (Max.)
- Turndown Ratio: 100:1
- Accuracy: +/-0.075% of span
- Working Temperature: -25~95 °C
- Connection Material: S.S. 304 / S.S. 316
- Diaphragm Material: S.S. 316L / Tantalum
- Process Connection: 1/2" NPT / 1/2" BSPP
- Over Pressure Limit: 120% of Full Scale
- Output: 4-20 mA (2 wires)
- Power Supply: 9-36 VDC
- Communication: HART
- Protection: IP67
- Explosion Proof: Ex d IIB T5 / Eex ia IIC T5

ALIAPT

SMART PRESSURE TRANSMITTER APT8000



ALIADP

SMART DIFFERENTIAL PRESSURE TRANSMITTER APT9000



SMART DIFFERENTIAL PRESSURE TRANSMITTER APT9000L



- Application: Liquid Level, Differential Pressure, Gauge Pressure, Absolute Pressure
- Measuring Range: 0-0.16 kPa~0-1.0 kPa (Min.)
0-4.0 MPa~0-20.0 MPa (Max.)
- Turndown Ratio: 100:1
- Accuracy: +/-0.075% of span
- Working Temperature: -25~95 °C
- Connection Material: S.S. 304 / S.S. 316
- Diaphragm Material: S.S. 316L / Has. B / Has. C / Monel / Tantalum

- Process Connection: 1/4" NPT / 1/2" NPT
- Output: 4-20 mA (2 wires)
- Power Supply: 9-36 VDC
- Communication: HART
- Protection: IP67
- Explosion Proof: Ex d IIB T5 / Eex ia IIC T5

D Series

DIRECT-MOUNT / REMOTE DIAPHRAGM SEAL

- Application: Liquid Level, Differential Pressure, Gauge Pressure, Absolute Pressure
- Process Connection: Flange / Tri-clamp
- Flange Material: CS / S.S. 304 / S.S. 316
- Diaphragm Material: S.S. 316L / Has. B / Has. C / Tantalum / PTFE-coated Tantalum Diaphragm
- Capillary Material: Stainless Steel with PVC coating
- Capillary Length: 1-10 m

- Flange Size: 1-1/2", 2", 3", 4"
- Temperature: -40~280 °C
- Max. Pressure: 8.0 MPa
- Option: Oil-free and Water-free Treatment

APT9500

SMART TRANSMITTER FOR DIFFERENTIAL PRESSURE FLOWMETER

- Application: Differential pressure flow measurement
- DP Sensor: Orifice, V-Cone, Venturi, Annubar...
- Pressure Range: 0-2500 kPa
- Turndown Ratio: 20:1
- Accuracy: +/-0.075% of span
- Display: Flow rate / Totalizer
- Working Temperature: -25~95 °C
- Connection Material: S.S. 304 / S.S. 316

- Diaphragm Material: S.S. 316L / Has. B / Has. C / Monel / Tantalum
- Process Connection: 1/4" NPT / 1/2" NPT
- Output: 4-20 mA (2 wires) / Pulse
- Power Supply: 9-36 VDC
- Communication: HART
- Protection: IP67
- Explosion Proof: Ex d IIB T5 / Eex ia IIC T5

ALIAVA

METAL TUBE VARIABLE AREA FLOWMETER

AVF250

- Application: Liquid, Gas, Steam
- Size: 1/2"-8"
- Turndown Ratio: 10:1 (20:1 Optional)
- Accuracy: +/-1.6% (+/-1.0 Optional)
- Material: S.S. 304, S.S. 316, S.S. 316L, S.S. +PTFE liner
- Pressure: Max. 40 kgf/cm²
- Temperature: -25~200 °C (-80~400 °C Optional)
- Process Connection: Flange / Thread / Tri-Clamp



With LCD Display Local Indication Explosion Proof

- Output: 4-20 mA, Pulse, Alarm
- Power Supply: Mechanical, 12-36 VDC, Battery
- Communication: RS485 (MODBUS), HART
- Protection Class: IP65 / IP67
- Explosion Proof: Ex d IIC T6 / Eex ia IIC T5
- Flow Direction: Bottom-Top, Bottom-Top Side, Bottom Side-Top Side, Left-Right, Right-Left

AVF250H



Explosion Proof With LCD Display Local Indication

- Application: Liquid, Gas
- Size: 1/2"-8"
- Turndown Ratio: 10:1 (20:1 Optional)
- Accuracy: +/-2.5% (+/-1.5 Optional)
- Material: S.S. 304, S.S. 316
- Pressure: Max. 40 kgf/cm²
- Temperature: 0~100 °C
- Process Connection: Flange / Thread / Tri-Clamp
- Output: 4-20 mA, Pulse, Alarm
- Power Supply: Mechanical, 12-36 VDC, Battery
- Communication: RS485 (MODBUS), HART
- Protection Class: IP65 / IP67
- Explosion Proof: Ex d IIC T6 / Eex ia IIC T5
- Flow Direction: Left-Right, Right-Left

ALIAVTX

VORTEX FLOWMETER ► AVF7000



- Application: Steam, Gas, Liquid
- Size: 1/2"-20"
- Accuracy: Liquid: +/-0.7% of reading, Gas & Steam +/-1.0% of reading
- Function: With Temp. / Pressure Compensation
- Material: S.S. 301, S.S. 304, S.S. 316
- Pressure: Max. 78 kgf/cm²



- Temperature: -40~420 °C
- Process Connection: Flange / Wafer
- Output: 4-20 mA, Pulse
- Power Supply: 12-32 VDC, Battery
- Communication: RS485 (MODBUS), HART
- Protection Class: IP65
- Explosion Proof: Ex d IIC T6 / Eex ia IIC T4

SWIRL FLOWMETER ► ASF7100



- Application: Gas
- Size: 1/2"-8"
- Accuracy: +/-1.5% of reading or +/-1.0% of reading (Optional)
- Function: With Temp. / Pressure Compensation
- Material: Aluminum alloy, S.S. 304, S.S. 316, S.S. 316L
- Pressure: Max. 64 kgf/cm²
- Temperature: -20~80 °C

- Process Connection: Flange
- Output: 4-20 mA, Pulse, Alarm
- Power Supply: 24 VDC +/-15%, Battery
- Communication: RS485 (MODBUS)
- Protection Class: IP65
- Explosion Proof: Ex d IIC T4-T6

ALIAPD

POSITIVE DISPLACEMENT FLOWMETER ►



APF810

APF830

APF850

APF860

- Application: Liquid
- Viscosity: 0.3-2000 cP
- Size: 3/8"-12"
- Accuracy: +/-0.5% of reading / +/-0.2% of reading (Optional)
- Repeatability: +/-0.1% of reading
- Material: Cast Iron, S.S. 304, S.S. 316
- Pressure: Max. 63 kgf/cm²

- Temperature: -10~120 °C / -10~250 °C (Optional)
- Process Connection: Flange / Thread
- Output: 4-20 mA, Pulse
- Power Supply: Mechanical, Battery
- Protection Class: IP65
- Explosion Proof: Ex d IIB T6 / Eex ia IIC T5

ALIAMASS

CORIOLIS MASS FLOWMETER ► ACF6000



- Application: Liquid
- Size: 1/2"-10"
- Turndown Ratio: 20:1
- Accuracy: +/-0.2% +/-ZS of reading
+/-0.1% +/-ZS of reading
- Repeatability: +/-0.03% +/-ZS of reading
- Density Range: 200-2300 kg/m³
Accuracy: +/-0.002 g/cm³
- Wetted Parts Material: S.S. 316L

- Process Connection: Flange
- Pressure: Max. 63 kgf/cm²
- Temperature: -40~250 °C
- Output: 4-20 mA, Pulse, Alarm
- Power Supply: 90-260 VAC or 24 VDC +/-10%
- Communication: RS485 (MODBUS), HART
- Protection Class: IP67
- Explosion Proof: Ex d e [ib] IIC T6

THERMAL MASS FLOWMETER ► ATF2000



- Application: Gas
- Size: 3/8"-280"
- Turndown Ratio: 100:1
- Accuracy: +/-1.0% of reading +/-0.5% FS
- Gas Pressure Effect:
<0.2% / bar of the measured value
- Gas Temp. Effect:
<0.02% / K of the measured value
- Repeatability: +/-0.25% of reading
- Wetted Parts Material: S.S. 304 / S.S. 316 / S.S. 316L

- Process Connection: Flange / Insertion Type
- Pressure: Max. 63 kgf/cm²
- Temperature: -40~350 °C
- Output: 4-20 mA, Pulse
- Power Supply: 90-260 VAC or 24 VDC +/-10%
- Communication: RS485 (MODBUS), HART
- Protection Class: IP67
- Explosion Proof: Ex d IIC T4 / Ex ib IIC T6

ALIATARGET

SMART TARGET FLOWMETER ► ATF80



- Application: Gas, Liquid, Steam
- Features: Suitable for low-velocity & High-temp, Low-pressure, Dirty
- Size: 1/2"-240"
- Accuracy:
Liquid: +/-0.75% of reading / +/-1.6% of reading (Insertion)
- Function: One Flow Range / Two Flow Range / Three Flow Range
- Material: S.S. 304, S.S. 316
- Pressure: Max. 100 bar

- Temperature: -60~450 °C
- Process Connection: Flange / Wafer / Insertion
- Output: 4-20 mA
- Power Supply: 10-32 VDC
- Communication: HART
- Protection Class: IP67
- Explosion Proof: Ex d IIC T6 / Eex ia IIC T4

