

# ia4xx Series

Smart IIoT Transducer for industrial automation.



## ia421(x) SERIES

- 견고한 직사각형 센서 프로브
- 강력한 자석 내장 부착
- 철이 없는 경우 브라켓을 통한 고정
- RJ-45 단자 체결 방식

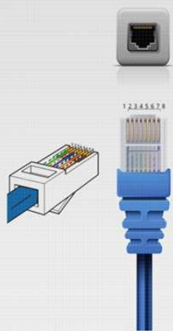
## ia4x3 SERIES

- 다양한 형태 제작 사양
- Thermistor

### 제품 사양

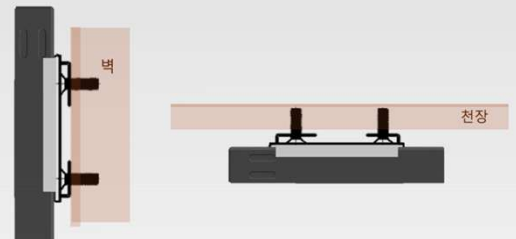
모델	ia421(a)	ia421(i)	ia421(r)	ia413	ia423
외관					
온도	-40°C~125°C ±0.3°C@0~90°C	-40°C~125°C ±0.2°C@0~90°C	-40°C~125°C ±0.2°C@0~65°C	-40°C~250°C ±0.2°C@25°C	-40°C~250°C ±0.2°C@25°C
습도	0%RH~100%RH ±2%RH@0~90°C	0%RH~100%RH ±1.8%RH@0~90°C	0%RH~100%RH ±1.8%RH@30~70°C	-	-
입력전원	3.3~5V	3.3~5V	12~24V	5V	5V
소비전력	1.7µA(Max 1.5mA)	1.7µA(Max 1.5mA)	2.1mA(Max 3.3mA)	1µA	1µA
출력	0~5V	I2C	Serial(RS-485)	0~5V	0~5V
크기(WxHxD)	75x14x19mm	75x14x19mm	75x14x19mm	제작사양	제작사양
무게	50g	50g	50g	30g	30g

### Wiring Diagram



모델	ia421(a)	ia421(i)	ia421(r)	ia4x3
1	Temperature	SCL	-	Temperature
2	Humidity	SDA	-	Temperature (ia423)
3	GND	GND	-	-
4	5Vdc	3.3~5Vdc	D+(A)	5Vdc
5	-	-	D-(B)	-
6	-	-	-	-
7	-	-	12~24Vdc	-
8	-	-	GND	-

### Bracket



### Arithmetic Expression

#### • ia421(a)

$$T(^{\circ}\text{C}) = -66.875 + 218.75 \times \frac{V_t}{V_{dd}}, \quad T(^{\circ}\text{F}) = -88.375 + 393.75 \times \frac{V_t}{V_{dd}}, \quad RH = -12.5 + 125 \times \frac{V_{rh}}{V_{dd}}$$

#### • ia421(r)

2-wire, 9600,n,8,1 modbus rtu, measure temperature/humidity: 40001 40002. request: id 03 00 00 00 02 crc crc. factory reset: ff 60 00 05 00 00 crc crc. change id: current 06 00 05 00 new crc crc

#### • ia421(i)

$$T(^{\circ}\text{C}) = -45 + 175 \times \frac{S_t}{2^{16} - 1}, \quad T(^{\circ}\text{F}) = -49 + 315 \times \frac{S_t}{2^{16} - 1}, \quad RH = 100 \times \frac{S_{rh}}{2^{16} - 1}$$