

MTII – A – **A1** – B – **B1** – **B2** – **B3** – **B4** – **B5** – **B6** – **B7** – C – **C1** – **C2** – **C3** – **C4** – Continued

Note: Sections A and B must be completed for pricing. Section C must be completed prior to order submission to Paragon.

**SECTION A  
PRIMARY ELEMENT**

**A1: Sensor Type**  
**OA Flow Sensor**  
 1=Non-Amplified Pitot-Type Flow Sensor  
 2=Sensor with Flow Coefficient  
**SA/RA/EA Duct Mounted Flow Sensor**  
 3=Non-Amplified Pitot-Type Flow Sensor  
 4=Sensor with Flow Coefficient  
**Fan Inlet Flow Sensor**  
 5=Non-Amplified Pitot-Type Flow Sensor  
 6=Sensor with Flow Coefficient (Piezometer Ring)  
**Pressure Sensor**  
 7=Low Pressure Application (≤1.0 in. w.c.)  
 8=High Pressure Application (>1.0 in. w.c.)

**SECTION B  
SIGNAL PROCESSOR OPTIONS**

**B1: Signal Processor F.S. Accuracy**  
 1=0.25% Full Scale Accuracy (Standard)  
 2=0.1% Full Scale Accuracy

**B2: Auto Zero**  
 0=Not Required  
 1=Include Auto Zero

*Notes:*  
 - Paragon recommends including Auto Zero on applications with velocities less than 2,000 fpm (10.16 m/s).

**B3: Communication**  
 0=Not Required  
 1=LonWorks®  
 2=BACnet MS/TP® Master  
 3=Modbus® RTU Slave

**B4: Air Density Compensation Using Temperature Transmitter (TT)**  
 0=Not Required  
 1=NEMA 4 TT Mounted to Station  
 2=NEMA 4 TT Packaged Separately  
 3=TT Provided By Others

*Notes:*  
 - For Option 0; a fixed value of 68°F will be used for air density calculations unless a different temperature value is specified in the Notes Section on the MicroTrans<sup>II</sup> Order Form.  
 - For Options 1 and 2, the NEMA 4 TT supplied by Paragon has a temperature range of -30 to 130°F and an output of 4-20mA (See the NEMA 4 TT IO&M for full specifications). For high temperature applications requiring custom temperature ranges, consult Paragon for pricing.  
 - For Option 3, the signal processor will be configured to receive a 4-20mA temperature input signal and will be scaled using a temperature range of -30 to 130°F. A fixed value of 68°F will be used for air density calculations until the unit is configured in the field to accept a temperature input signal (see MicroTrans<sup>II</sup> IO&M).

**B5: High/Low Alarm**  
 0=Not Required  
 1=Include Alarm

*Notes:*  
 - For LEED IEQ Credit 1 (2009 Edition) the signal processor can be configured to generate an alarm when the airflow value varies by 10% or more from the design value (see MicroTrans<sup>II</sup> IO&M for details on the high/low alarm).

**B6: Controller**  
 0=Not Required  
 1=Controller (P,I,1/D)  
 2=Controller (P,I,1/D) with Economizer Override

**B7: Enclosure**  
 1=NEMA 4X(Standard)  
 2=NEMA 4X with 1/4" Compression Fittings.

**SECTION C  
REQUIRED PRODUCTION DATA**

**Note:** This section is not included in the overall part number but must be completed prior to submitting an order to Paragon for proper fabrication.

**C1: Tag Number**  
Example: AHU-1

**C2: System Served**  
Example: SA

**C3: Area Factor/Flow Coefficient (Specify)**  
*Notes:*  
 - When the MicroTrans<sup>II</sup> is being connected to a non-amplified Pitot-type flow sensor (such as those manufactured by Paragon), enter the area of the sensing plane in square feet. For double wide/double inlet fans the area should be summed for both inlets. An area calculator is available in the MicroTrans<sup>II</sup> Order Form.  
 - When the MicroTrans<sup>II</sup> is being connected to a sensor with a flow coefficient (such as a piezometer ring), enter the flow coefficient as specified by the manufacturer for the associated model/size AND provide Paragon the sensor data sheet.  
 - When the MicroTrans<sup>II</sup> is being connected to a pressure sensor, enter a 0.

**C4: Engineering Units**

Actual Flow Units	Standard Flow Units	Actual Velocity Units	Standard Velocity Units	Pressure Units
1=acfm	7=scfm	14=afpm	17=sfpm	20=in w.c.
2=aL/s	8=scfh	15=am/s	18=sm/s	21=Pa
3=am <sup>3</sup> /s	9=sL/s	16=%	19=%	22=kPa
4=am <sup>3</sup> /min	10=sm <sup>3</sup> /s			23=mm w.c.
5=am <sup>3</sup> /h	11=sm <sup>3</sup> /min			24=%
6=%	12=sm <sup>3</sup> /h			
	13=%			

*Note:*  
 - Engineering units are field selectable.

MTII - C - **C5** - **C6** - **C7** - **C8** - **C9** - **C10** - **C11** - **C12** - **C13** - **C14** - **C15**

Note: Sections A and B must be completed for pricing. Section C must be completed prior to order submission to Paragon.

## SECTION C REQUIRED PRODUCTION DATA

**Note:** This section is not included in the overall part number but must be completed prior to submitting an order to Paragon for proper fabrication.

### C5: Flow Rate/Velocity/Pressure Range (Specify)

Notes:

- For flow applications, enter the design maximum flow rate or velocity in units specified under Section C4.
- The signal processor operating range will be 110% of the flow rate specified.
- The smallest operating range available is 693 fpm (3.52 m/s) velocity.
- Signal processor span selection is based on 130% of the flow rate specified; this will allow for field adjustment of the operating range.
- For pressure applications, see the Technical Specifications Section of the MicroTrans<sup>II</sup> Technical Data Sheet for available pressure ranges. For a custom pressure range, consult Paragon for pricing and availability.

### C6: Site Elevation

Note:

- Enter site elevation in feet above mean sea level.

### C7: Process Output

- 1=4-20 mA
- 2=0-5 VDC
- 3=0-10 VDC

Notes:

- The signal processor process output is linear to the operating range (see notes in Section C5 for definition of operating range).
- Process output is field selectable.

### C8: Temperature Units

- 0=Not Required
- 1=°F
- 2=°C

Note:

- Temperature units are only displayed on signal processors with air density compensation (see Section B4). If air density compensation is not ordered select 0.
- Temperature units are field selectable.

### C9: Temperature Output

- 0=Not Required
- 1=4-20 mA
- 2=0-5 VDC
- 3=0-10 VDC

Note:

- Temperature output is only provided on signal processors with air density compensation (see Section B4).
- If air density compensation is not ordered select 0.

The following Sections C10 through C15 only need to be completed if the optional controller is ordered (see Section B7)

### C10: Process Controlled

- 1=Flow
- 2=Negative Duct Pressure
- 3=Positive Duct Pressure

### C11: Control Variable

- 1=Fan Variable Speed Drive
- 2=Normally Closed Damper
- 3=Normally Open Damper

### C12: Setpoint

- 1=External Signal 4-20 mA
- 2=External Signal 0-10 VDC
- 3=Internal Setpoint

### C13: Internal Setpoint Value (Specify)

Notes:

Enter 0 for External Signal (see Section C3).

### C14: Controller Output

- 1=4-20 mA
- 2=0-5 VDC
- 3=0-10 VDC

### C15: Economizer Override

- 0= Not Required
- 1=4-20mA Input Signal
- 2=0-10 VDC Input Signal