



COMPTUS

### DESCRIPTION

The **Comptus A70 Series Weather Instruments** with signal conditioning provide a 4-20 mA output proportional to wind speed (**A70-SL**), wind direction (**A70-DL**), barometric pressure (**A70-PL**) or rainfall (**A70-RL**). The **A70 Series** provides the user with weather information that can be used for monitoring purposes or as an input to control systems.

### FEATURES

- **Rugged construction**
- **Reliable operation**
- **Industry standard 4-20 mA output**
- **Track-mounted transmitter**



### COMMON SPECIFICATIONS

<b>Supply Voltage</b>	12-24 VDC, 30 mA max; 24 VAC, 2.3 VA, 120 VAC (per model ordered)
<b>Accuracy</b>	±1%
<b>Signal Output</b>	4-20 mA @ 700Ω
<b>Warranty</b>	1 year

### APPLICATION

#### Wind Speed (A70-SL)

The wind speed is measured with a three-cup anemometer, and a 4-20 mA output signal proportional to 0-100 mph is generated. Accuracy from 3-9 mph is ±1 mph; above 10 mph, accuracy is ±5% of reading. The **A70-SL** is supplied with 60' (18.28m) of cable and a 10" (25.40 cm) stub mast for mounting the anemometer.

#### Wind Direction (A70-DL)

Wind direction is measured with a precision potentiometric wind vane that produces a signal proportional to the azimuth of the wind. This signal is converted to a 4-20 mA output over 0 to 360 degrees. The vane has a four-degree deadband on either side of north. The **A70-DL** is provided with 60' (18.28m) of cable and an S mast for mounting.

#### Barometric Pressure (A70-PL)

The **A70-PL** senses barometric pressure by an integrated silicon, absolute pressure sensor with integral temperature compensation. It outputs a 4-20 mA signal over 27" to 31" Hg. Accuracy is ±0.05" Hg. The sensor is mounted to the transmitter board, and a 3/16" (0.48 cm) tube may be attached to the sensor to provide remote pressure sensing.

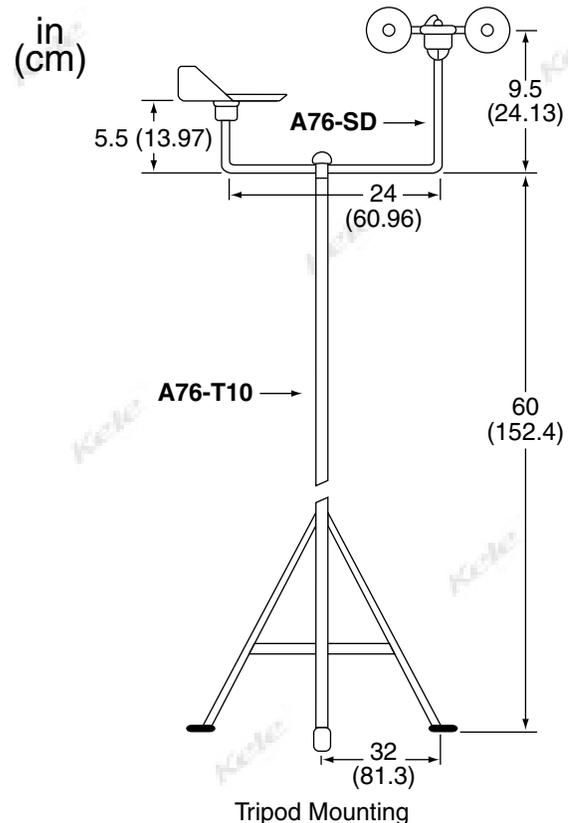
#### Rainfall (A70-RL)

The **A70-RL** utilizes tipping bucket technology to measure rainfall and outputs a 4-20 mA signal over a range of 0" to 1" (0 to 2.5 cm). When the output reaches 20 mA (1"), it resets to 4 mA, and the cycle begins over again. Accuracy is ±4%. The sensor includes 50' (15.24m) of cable.



**A96  
Lightning Arrestor**

### ASSEMBLY / DIMENSIONS

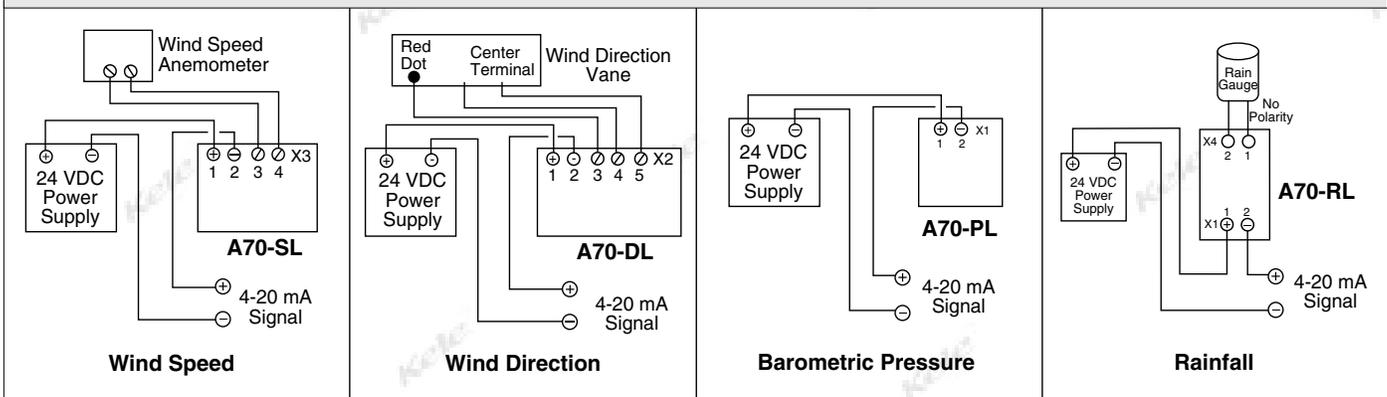




# GAS & SPECIALTY SENSORS

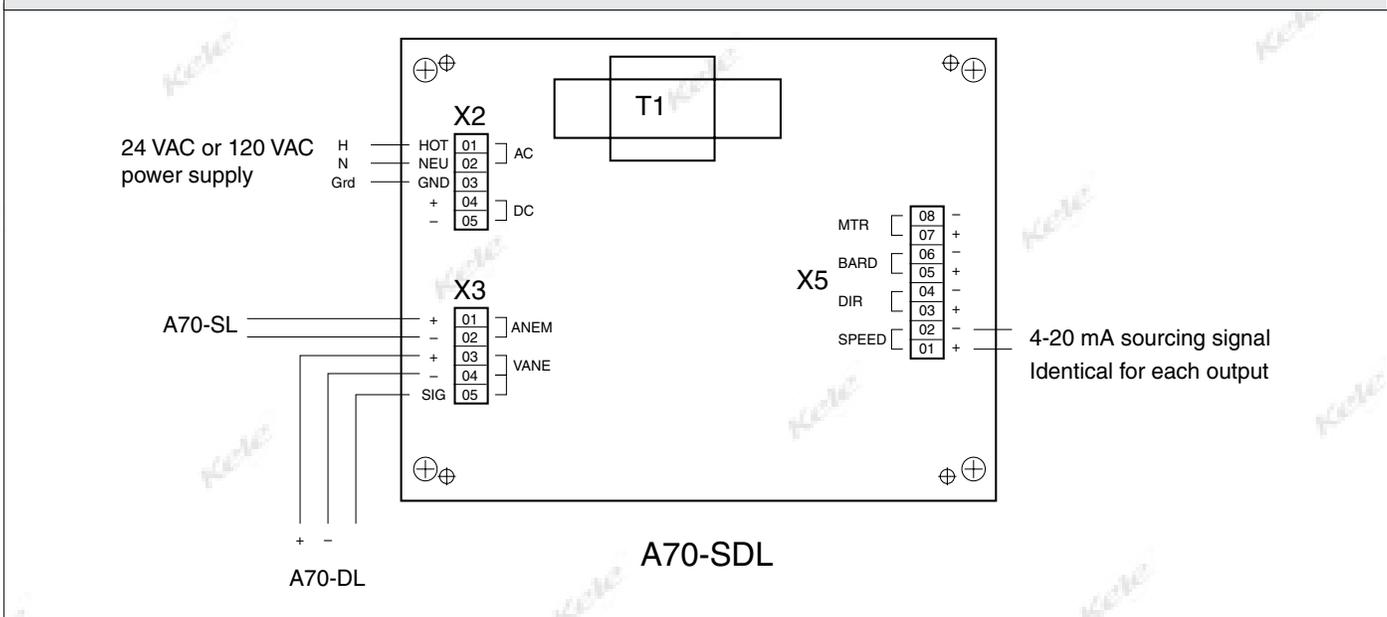
## WEATHER INSTRUMENTS A70 SERIES

### WIRING



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### WIRING



GAS & SPECIALTY SENSORS

### ORDERING INFORMATION

MODEL	DESCRIPTION
<b>A70-DL</b>	Wind direction transmitter, 24 VDC loop powered
<b>A70-PL</b>	Barometric pressure transmitter, 24 VDC loop powered
<b>A70-RL</b>	Rainfall transmitter, 24 VDC loop powered
<b>A70-SDL</b>	Wind speed/direction transmitters, 24 VDC loop powered
<b>A70-SDPL</b>	Wind speed/direction and barometric pressure transmitters, 24 VDC loop powered
<b>A70-SL</b>	Wind speed transmitter, 24 VDC loop powered

For 24 VAC models, add "4" to end of model number; for 120 VAC models add "6" to end of model number

### ACCESSORIES

<b>A76-SD</b>	Mounting bracket for wind speed and direction transmitters
<b>A76-T10</b>	Tripod tower with mast (10 ft/3m total height) for wind speed and direction sensors
<b>A96-100P</b>	Lightning arrestor for wind speed sensor (includes pipe-mounting clamp)
<b>A96-200P</b>	Lightning arrestor for wind direction sensor (includes pipe-mounting clamp)