

SPECIALTY GAS DETECTORS DATASHEET PRU-24 Sample Draw System





The PRU-24 is a remote sample draw pump unit that is designed to draw a continuous flow of target air from a hard to access location through to a connected gas detector. It allows for continuous gas monitoring in areas that a gas detector cannot be mounted due to structural limitations and/or the physical location where the gas detector needs to be mounted would make it difficult or impossible to access for maintenance. Wherever an ambient gas detection system is unsuitable for collecting target gas samples, a sample draw pump unit is an ideal alternative.

The PRU-24 has an inlet and an outlet port, a filter, pump and an internal adjustable flow meter. It should be installed securely against a flat surface, outside the target location with sample tubing running from the sampling environment into the Inlet port and back out of the Outlet port connecting to a gas detector using a flow adapter plug. When the gas readings reach a predetermined level, the gas detector will act as configured, for example send a signal to a controller or BAS and/or activate visual and audible alarm devices.

The filter should be replaced with it becomes dirty and the tubing should be checked regularly to ensure it remains unblocked. For the best response, the sample tubing between the sample point and the inlet port should be kept as short as possible. The device has been factory tested with 15.24 m (50 ft) of sample tubing. The type of gas, diameter and length of tubing will affect the rate of air flow, which is limited to 1L/min. Testing should be done if longer tubing is required to make sure the air flow is not less than 1L/min.

The PRU-24 is compatible with many of our gas detectors including the CGAS Detector, LPT, LPT-A and LPT-M product lines and CXT / CXT2 Explosion Proof transmitters (special tubing adpater required).

KEY FEATURES

- » Safely sample air in difficult to monitor locations
- » Simple to use, easy to connect
- » Powered by 24 VAC or 24 VDC
- » Sample draw pump and adjustable flow meter
- » Standard water / dust tight, corrosion resistant enclosure (drip proof)

APPLICATIONS

- » Wastewater Treatment Plants
- » Medical Gas Cylinder Storage Rooms
- » Oxygen Depletion Monitoring
- » Chemical Plants
- » Controlled Atmosphere Rooms
- » Poultry Houses
- » Utility Stations
- » Aerospace Industry » Automotive Manufacturing
- » Automotive Manufactum

» ... and many more

TECHNICAL DRAWING



TECHNICAL SPECIFICATIONS

MECHANICAL

Enclosure	ABS / Polycarbonate. Copper coated interior to reduce RF interference, IP54
Weight	1.6 kg / 3.6 lbs
Size	254 x 218 x 109 mm 10.0 x 8.6 x 4.3 in
Sample Tubing (sold separately)	1/8 in ID x 1/4 in OD Factory tested distance: 15.24 m / 50 ft

INPUT / OUTPUT

Flow Meter	Normal operation: 2.12 SCFH / 1.0 LPM	

ELECTRICAL

Power Requirement	24 VAC, 60 Hz, requires Class 2 transformer 24 VDC @ 320 milliamps
Current Draw	0.37 amps @ 24 VAC 0.32 amps @ 24 VDC
Wiring	to meet local/site electrical codes
Fuse	0.5 amps

ENVIRONMENTAL

Operating Temperat	ture -1°C to 40°C (30°F to 105°F)	
Humidity	non-condensing	
Transmitter connected to the the PRU-24 is also affected by temperature/RH.		

Caution: The Sample Draw Pump Unit should not be used inside classified hazardous areas or to sample draw combustible gases exceeding 50% LEL concentrations or Oxygen concentrations above 30% vol because the pump is not intrinsically safe.



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PRODUCT CODES

PRU-24-A	Remote sample draw unit, adjustable flow meter and inline airfilter, 24 VAC powered	
PRU-24-D	Remote sample draw unit, adjustable flow meter and inline airfilter, 24 VDC powered	
ACCESSORIES		
CET-715A-SDP	Sample Draw Pump Calibration Kit for 17, 34, 58, 74, 100 L cylinders, 1.0 LPM demand flow regulator & adapter to fit 17 L cylinder	
CET-8000-CMT	Sample Draw Tubing, clear, 15.24 m (50 ft) roll, 1/8" ID x 1/4" OD	



