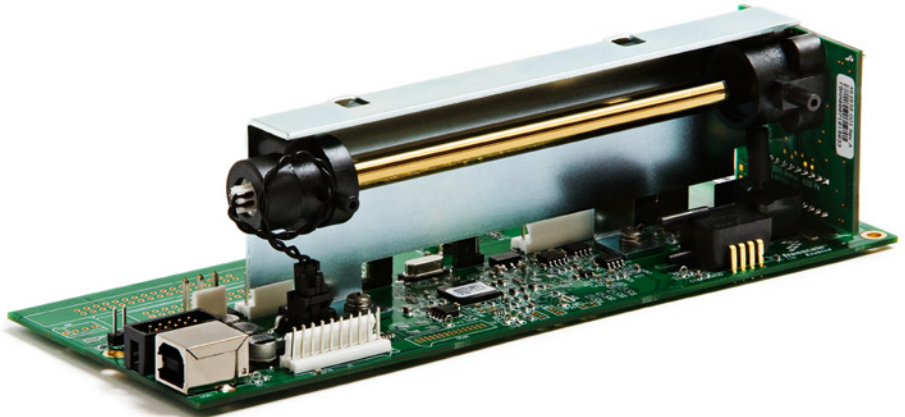


## OEM gas sensor detects Freon refrigerants and Carbon Dioxide for leak detection and other applications

### 6552

- Measure up to 5 gases: 3 via NDIR and 2 via plug-in sensors
- RS232 or USB
- Most types of Freons
- Field upgradable to measure additional gases



Andros achieves high reliability through simplicity of design and implementation. Andros Non-Dispersive Infrared (NDIR) gas modules are inherently reliable because there are no moving parts in the optical path.

Unlike alternative analyzers that require motors, gratings, chopper-wheels, and/or other moving components with limited useful lives, Andros gas analyzers use a pulsed infrared source to achieve high accuracy with high reliability.

Available with two gas channels, the Andros 6552 can be configured for specific types of refrigeration plants or as a general purpose device that can be applied to any type or combination of refrigeration systems that may employ Freons and Carbon Dioxide.

The following standard features can provide a variety of additional functions to simplify system integration:

- Control of pneumatic components via RS232 or USB communications with the host.
- User-defined TTL outputs for interfacing to auxiliary devices or alarms.

- Two analog inputs for other process variables such as level or temperature.
- Two electrochemical sensor inputs for a total of five gases from a single instrument.

#### Extensive Calibration For High Accuracy

Every Andros 6552 NDIR bench is individually calibrated at four separate temperatures between 0 and 50°C. At each of the four temperatures the gas channels are profiled with up to 20 separate gas concentrations.

The results of this extensive calibration process are stored within each system resulting in the most accurate analysis possible. This attention to detail provides a highly accurate and stable factory calibration of the NDIR analyzer.

Our factory calibration is so accurate and stable that many of our customers have chosen to never re-calibrate their Andros analyzers.

The enhanced optics and electronics of the 6552 have virtually eliminated zero drift after the initial warm up period. The temperature and pressure compensation eliminates

the major causes of span drift in many NDIR instruments.

#### Optical Architecture

The Andros 6550 Series offers greater design flexibility to OEMs due to its small overall size, our ability to customize subsystem designs to your specifications, and low power consumption. Our analyzer can be fitted into a wide variety of enclosures.

The Andros Operating System (OS) software and communications protocol is designed to make system integration simple and fast.

Our command set has the flexibility to provide a variety of output configurations from NDIR gas readings only to external devices and components interface and control.

The OS monitors the critical operating parameters that affect performance and provides real-time status of the overall integrity and quality of the gas measurement. The OS is stored in FLASH memory and can be updated in the field using a PC and Andros software utilities.

## Technical Data

Response time	Response times are specified at a sample flow rate of 1 liter per minute through the 6552 sample cell.
Data refresh rate	1 second
Warm-up time	30 minutes fully stable, 3 minutes for reduced accuracy unless zeroed prior to taking measurement
Operating Temperature	0° - 70°C (32° - 158° F), accuracy not specified > 50°C
Operating humidity:	To 95% RH (Non-condensing)
Operating altitude:	-300 to 3,000m (-1,000 to 10,000 ft)
Host communication:	USB or RS232C asynchronous serial; 19,200 bps or 9,600 bps (default is 19,200)
Size	19.18 cm L, 7.37 cm W, 5.03 cm H (7.55 x 2.90 x 1.98 in)
Weight:	0.3 kg (0.8 lb)
Input power:	+12 Volts DC nominal (+9 to +16)
Power consumption:	1.8 Watts average at 12 VDC
Warranty:	1 year parts and labor warranty
Compliance:	Designed to meet or exceed EN 14624, "performance of mobile leak detectors and of room controllers of halogenated refrigerants"

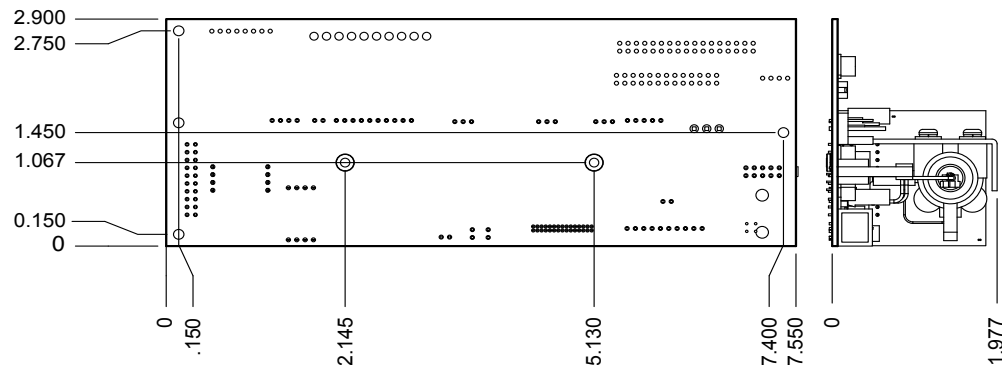
Standard freons available: R22, R134A, R404A, R407C, R410A, R507, R422A, R422D

## Specifications

Measurement Method	Gas	Resolution	Measurement Range	Accuracy	Precision	Response Time
NDIR (Non-Dispersive Infrared) on board	Most CFC, HFC and HCFC refrigerants	1 ppm	1 to 100 ppm	±4 ppm abs. or ±3% rel.	±4 ppm abs. or ±3% rel.	T <sub>90</sub> & T <sub>10</sub> <3 Seconds
			101 to 1,000 ppm	±5% rel.		
			1,001 to 10,000 ppm	+/- 8% rel.		
	CO <sub>2</sub>	0.01%	0.01% to 2.00%	±0.02% abs. or ±3% rel.	±0.02% abs. or ±3% rel.	T <sub>90</sub> & T <sub>10</sub> <3 Seconds
2.01% to 20.00%			±5% rel.			
Electrochemical sensors via connector	O <sub>2</sub> NO <sub>x</sub>	performance dependent upon electrochemical sensor model				

## Dimensions

All dimensions in inches



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LumaSense Technologies, Inc., reserves the right to change the information in this publication at any time.

## Awakening Your 6<sup>th</sup> Sense

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