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## Low Limit of Detection (L.O.D.) Formaldehyde Measurement

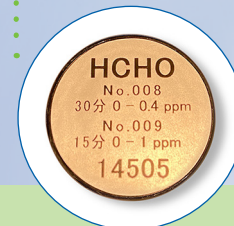
The FP-31G is a highly sensitive portable gas detector specific for formaldehyde detection. The FP-31G has a direct readout of the formaldehyde measurement on an easy-to-read LCD display. The unit is capable of detecting very low levels of formaldehyde, suitable for Indoor Air Quality (IAQ) applications where accurate low L.O.D.s are essential, yet can also measure up to higher toxic gas exposure levels with a quick test.

### Detection Ranges

30 minute sample 0 - 0.4 ppm (0.005 ppm/digit)

15 minute sample 0 - 1.0 ppm

There are no known interfering gases (a significant problem for most other sensor technologies at low L.O.D.s), as shown on the chart on the reverse side of this brochure.



Detection (test) Tablet

Portable base unit utilizes photoelectric photometry to read the absorbance change that HCHO induces in the sensor.

- Simple operation
- Built-in sample draw pump
- Easy-to-read LCD display
- Self-diagnosis
- Direct digital readout
- Colorimetric detection tablet method
- No false readings from interfering gases
- Operates on 4 AA alkaline batteries
- Stores 99 readings
- No warm-up time

### Measurement Principle

Photoelectric photometry method which utilizes colorimetric tablets for detection. A tablet is placed into the instrument, and then a test area air sample is pumped onto the tablet for either a 15 minute or a 30 minute period. If formaldehyde is present, it will cause the chemically impregnated tablet surface to darken or stain. The magnitude of the stain directly correlates to the level of formaldehyde in the air. The stain darkness is read by an optical sensor in the FP-31G, and then the instrument calculates the formaldehyde concentration, displaying it in ppm HCHO.

**FP-31G**

Formaldehyde Meter



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# FP-31G

## Formaldehyde Meter

### Specifications

Model Name	FP-31G
Detection Range	(30 minute test): 0-400ppb, 5ppb/digit (15 minute test): 0-1000ppb, 0-10ppb/digit
Detection Principle	Photoelectric photometry
Detection Method	Colorimetric tablet method (accumulating measurement)
Accuracy	± 20% of reading or ± 5% of full scale (whichever is greater)
Display	Digital LCD
Sampling Method	Sample drawing with built-in pump
Operating Temp / RH	-10 to 40°C (14 to 104°F), below 90%RH
Memory	Up to 99 readings (automatic recording at the completion of measurement)
Self-Diagnosis	Failure of light source and light receiver, low battery voltage, pump failure, system trouble
Power Source	4 x AA size alkaline batteries
Continuous Operation	Approximately 12 hours (with no backlight, with alkaline batteries at 20°C)
Dimensions	Approx 85(W) x 190(H) x 40(D)mm, 3.35(W) x 7.48(H) x 1.57(D) inches
Weight	500g, 17.6 oz
Standard Accessories	<ul style="list-style-type: none"> <li>Detection (test) tablets (20 pcs/pack)*</li> <li>Carrying case</li> <li>AA size alkaline batteries</li> <li>Operating manual</li> </ul>
Optional Accessories	FP-ACC-T20 replacement test sensors (20 pack), FP-ACC-TCAL zero and span cal tabs, FP-USB-1M USB-IRdA cable (for downloading stored data)
Warranty	One year material & workmanship

### Field Test Verification Data

Measurement Place	FP-31G	DNPH method***
Interior	0.020 ppm	0.025 ppm
Locker	0.030 ppm	0.03 ppm
Furniture	0.040 ppm	0.05 ppm

### Sensitivity to Interference Gasses (typical)

	Concentration	FP-31G reading
Toluene	1.0 vol.%	0 ppm
Benzene	1.0 vol.%	0 ppm
Acetaldehyde	100 ppm	0 ppm
Carbon Monoxide	50 ppm	0 ppm
Carbon Dioxide	1.0 vol.%	0 ppm
Ammonia	25 ppm	0 ppm
Acetone	1.0 vol.%	0 ppm

☑ Measure Smart ☑ Report Efficiently

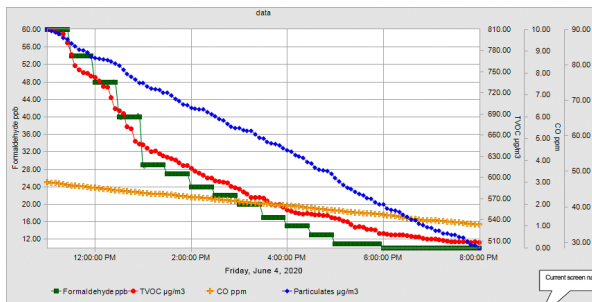


FP-ACC-T20 Replacement test (detection) tablet pack (20 pcs)



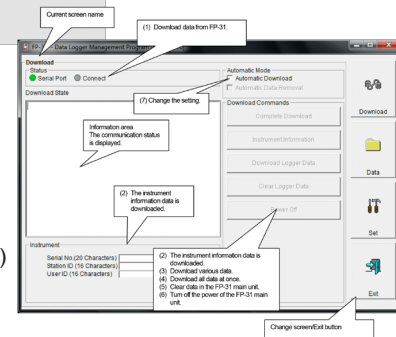
FP-ACC-TCal optional, reusable calibration tabs allow user to verify highly accurate operation\*\*

CE Compliant to CE regulations



Graph HCHO trend logs from manually entered FP-31G readings when added to other parameters auto-logged on WolfSense PC (free)

FP-SWS-1 Optional software (free) to download stored readings



\* Please note: Detection tabs are single use and have a 6 month shelf life. They should be stored in a refrigerator (37°F-50°F, 3-10°C) between use.  
 \*\* Calibration tabs have an 8 month shelf life and may be used unlimited times over their life.  
 \*\*\* Dinitrophenylhydrazine detection method

SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT FURTHER NOTICE



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