



MINITOOLS PRO

Leak detector, manometer,
anemometer, thermometer, IR
thermo-hygrometer

For maintenance of heating, ventilation and air conditioning plants, the MiniTools PRO are the ideal instruments for leakproofness inspections, leak detection, differential pressure and temperature measurements, verification of ambient conditions and air flow measurements.

Description

For maintenance of heating, ventilation and air conditioning plants, the MiniTools PRO are the ideal instruments for leakproofness inspections, leak detection, differential pressure and temperature measurements, verification of ambient conditions and air flow measurements.

RLD 150: Refrigerant gas leak detector

Ideal for leakproofness inspections of cooling plants or for leakage detection

- Application fields:
 - Pharmaceutical industry
 - Food industry
 - Building services engineering
 - Multi color visual display
 - Alarm: Buzzer (acoustical) and optical (LEDs)
 - Fast reaction time
 - High / Low sensitivity
 - Gooseneck for easy handling

CLD 150: Combustible gas leak detector

Ideal for leakproofness inspections of gas mains or for leakage detection

- Application fields:
 - Heating and ventilation branche
 - Building industry
 - Building services engineering
 - Gas leak proofness in motorhomes
 - Multi color visual display
 - Alarm: Buzzer (acoustical) and optical (LEDs)
 - Fast reaction time
 - High / Low sensitivity
 - Gooseneck for easy handling

LP 150: Digital differential manometer

Perfectly designed for differential pressure measurements and other pressure measurements

Ideal for online documentation via PC

- Application fields:
 - Checking pressure of compressed natural gas at supply pipes (range: 1.50 mbar)
 - Controlling pressure of burners (range: approx. 25 mbar)
 - Checking gas tanks' inlet pressure and outlet pressure (range: approx. 40 / 60 mbar)
 - Checking air-gas-relation on gas heaters
 - Controlling high pressure gas ports up to 200 mbar (public utility)
 - Large display to showing two measurements simultaneously and differential pressure in mbar, bar, psi, kPa, mmHg...
 - Zero function
 - MAX / MIN / Auto-Off function
 - Average measurements by adjustable time

TK 152: 2-channel TC thermometer

A perfectly designed instrument for differential measurements, or when measurement documentation is required.

- Application fields:
 - Differential measurements of flow / return boiler, a radiator, a pump, a heated floor
 - Measurements on test set-ups
 - Measurements of the energy supply-branch
 - Process measurements
 - Large display to showing two measurements simultaneously and differential temperature
 - Optional PC software for online documentation

HD 150: Hygrometer - Infrared thermometer

Perfectly designed for clima specialists: By simultaneous measurement of dewpoint and surface temperature you are able to avoid mould on walls. The rugged case protects the instrument in rough areas.

- Application fields:
 - HVAC measurements
 - Detects cold bridges and damaged insulation
 - Wall dewpoint: Comparison against the wall surface temperature
 - IR-Temperature instrument with integrated humidity sensor and input for thermocouple type K
 - IR-Temperature measurement: laser sighting, high precision lens with 30:1
 - MAX / MIN / HOLD functions

LV 150: Vane anemometer

VT 150: Hot wire anemometer

Ideal for HVAC measurements. Robust instrument with many useable features.

- Application fields:

- Measuring air velocity in ducts
- Volume flow measurements at air condition systems
- Checking air filter system
- Measuring the environment conditions at working places
- Measurements of the energy branch
- Large afficheur indiquant deux mesures simultanément
- Fonction MAX / MIN
- Mesure de la moyenne sur 20 points
- Simple d'utilisation pour la mesure en débit d'air
- Fonction Auto/Off disponible
- Logiciel PC inclus pour enregistrement des mesures (VT 150 uniquement)
- Large display to show two measurements simultaneously
- MAX / MIN function
- Average measurement for 20 values
- Easy to use volume flow measurement
- Disable Auto-OFF function
- Incl. PC software for online documentation (only VT150)

Specifications

Gas leak detection

Model	RLD 150	CLD 150
Type of gaz	Refrigerant gas	Combustible gas
Sensitivity	3 gr / year	5 ppm
Gas detected	R-134a, R-404A, R-410A, R-407C, R-22, R502, R-600A...	Liquid gas, propane, natural gas, fuel oil
Auto-OFF	Automatically after 10 minutes	
Housing	ABS rugged plastic	
Display	Multi-color visual display with sound alarm (buzzer) and visual alarm (LEDs)	
Power supply	4 x AA 1.5 V	
Size	173 x 66 x 56 mm	
Weight	1 kg	

Pressure measurement

Model	LP 150
Type	Digital differential manometer
Range	-200 to +200 mbar
Resolution	0.01 mbar
Accuracy	±0.2% FS
Further features	Function MIN / MAX / Average by adjustable time Zero function Auto-OFF
Housing	ABS rugged plastic
Display	Large 7 segment LCD display with backlight Display of two measurements simultaneously and of differential pressure in mbar, bar, psi, kPa, mmHg...
Power supply	9 V battery 230 VAC charger included
Interface	USB
Size	210 x 75 x 50 mm
Weight	1.180 kg

Temperature and hygrometry measurement

Model	TK 152		HD 150		
Type	Two channel thermometer for thermocouples		Hygrometer – Infrared thermometer		
Range	-200°C to 1370°C		HR 0 to 100%	IR 8-14 μm -50°C to +500°C	Thermocouples -100°C to +1370°C
Resolution	From -199.9°C to +199.9°C: 0.1°C Above: 1.0°C		0.1%	Above 200°C: 0.1% Below: 1°C	
Accuracy	±0.1% or ±0.7°C		±4%	±2°C or ±2% Whichever is greater	±1°C or ±1% Whichever is greater
Further features	Optional: PC software for online documentation		IR: Spectral response: 8-14 μm Laser pointing, high precision lens with 30:1 optics Function MIN / MAX / HOLD / auto-OFF		
Housing	ABS rugged plastic				
Display	Large 7 segment LCD display with backlight Display of two measurements simultaneously and of differential measurements				
Power supply	9 V battery 230 VAC charger included				
Interface	USB				
Size	184 x 64 x 30 mm	255 x 45 x 34 mm			
Weight	400 g	1.7 kg			

Air flow and velocity measurement

Model	LV 150		VT 150	
Type	Vane anemometer		Hot wire anemometer	
Range	Air velocity 0.40 to 30 m/s	Temperature -10 to +60°C	Air velocity 0.10 to 25 m/s	Temperature 0 to +50°C
Resolution	0.01 m/s	0.1%	0.01 m/s	0.1%
Accuracy	±3% FS	±2°C	±5% FS	±2°C
Further features	Function MIN / MAX / auto-OFF Average measurement over 20 values			
			PC software for online documentation	
Housing	ABS rugged plastic			

Display	Large 7 segment LCD display with backlight Display of two measurements simultaneously and of differential measurements	
Power supply	9 V battery 230 VAC charger included	
Interface	USB	
Size	210 x 75 x 50 mm	
Weight	1.8 kg	2.05 kg

Models and accessories

Instrument:

RLD150	Refrigerant gas leak detector (delivered in suitcase)
CLD150	Combustible CH4 gas leak detector (delivered in suitcase)
LP150	Digital differential manometer, -200...+200 bars (delivered in suitcase)
TK152	2 channel thermocouple K thermometer, -200...+1370°C
HD150	Infrared thermometer, -50...+500°C + TC thermometer, -100 ...+1370°C + hygrometer (delivered in suitcase)
LV150	Vane anemometer, 0,40...30 m/s (delivered in suitcase)
VT150	Hot wire anemometer, 0,10...25 m/s (delivered in suitcase)

Packing information:

	RLD 150	CLD 150	LP 150	TK 152	HD 150	LV 150	VT 150
Size	173 x 66 x 56 mm		210 x 75 x 50 mm	184 x 64 x 30 mm	255 x 45 x 34 mm	210 x 75 x 50 mm	
Weight	1 kg	1 kg	1.180 kg	400 g	1.7 kg	1.8 kg	2.05 Kg