

# THERMOMETERS - FIELDPIECE

## Fieldpiece Thermometer

Airefrig Part Number	Description	List Price Ex GST
SIR2	Pocket Sized Laser Thermometer -33 C to +250 C	\$164.17
SIP2	Pocket Sized Infrared Thermometer -30 C to + 530 C	\$82.49
SPK1	Portable Digital Thermometer -50 C to + 200 C	\$64.17
ST4	Dual Temperature Meter, c/w Thermocouples, C or F	\$298.34



SIR2



SIP2



SPK1



ST4

## Fieldpiece Digital Pocket Thermometer

Airefrig Part Number	Description	List Price Ex GST
SPDM1	Digital Pocket Thermometer	\$110.00

Display: 3½ digit LCD with a max reading of 1999.  
 Auto power off: approx. 10 minutes.  
 Power: Two 1.5V button-type batteries  
 Battery life: 70 hours continuous operation.  
 Measurement rate: 2 times per second, nominal.

### Resistance (autoranging)

Ranges: 200Ω, 2kΩ, 20kΩ, 200kΩ, 2MΩ, 20MΩ  
 Resolution: 100mΩ

Accuracy:  
 ±(2.0% rdg + 5 dgts) on 200Ω range  
 ±(2.0% rdg + 4 dgts) on 2kΩ, 20kΩ, 200kΩ  
 ±(3.0% rdg + 4 dgts) on 2MΩ range  
 ±(5.0% rdg + 5 dgts) on 20MΩ range

Overload protection: 450VDC or AC rms

### Continuity

Audible indication: Less than 25Ω  
 Response time: 500ms  
 Overload protection: 450VDC or AC rms

### Diode test

Audible indication: Less than .25V  
 Range: 2V  
 Resolution: 10mV  
 Accuracy: ±(3.0% rdg + 3 dgts)  
 Test current: 1.2mA  
 Overload protection: 450VDC or AC rms

### DC volts (autoranging)

Ranges: 2V, 20V, 200V, 600V  
 Resolution: 1mV  
 Accuracy: ±(2.0% rdg + 2 dgt)  
 Input impedance: 10MΩ on 2V, 9.1MΩ all other  
 Overload protection: 600VDC or AC rms

### AC volts 50/60Hz (autoranging)

Ranges: 2V, 20V, 200V, 600V  
 Resolution: 1mV  
 Accuracy: ±(4.0% rdg + 5 dgts)  
 Input impedance: 10MΩ on 2V, 9.1MΩ all other  
 Overload protection: 600V DC or AC rms



SPDM1

# FIELDPIECE INSTRUMENTS

## HS30 Series Head Attachments

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ATH4  
Dual Temperature  
Head



AUA2  
Milli-Micro Amp  
Head



ADMN2  
Manometer  
Head



ATIR3  
Infrared Surface  
Temperature Head



AAV3  
Air Velocity with  
Temperature Head



ATC3  
Pipe Clamp  
Thermocouple



ARH4  
Air Temperature  
& RH% Head



AVH1  
Voltage Head



ACH  
Current Clamp  
Head



Superheat & Subcooling  
ASX14 for R22 & R410a  
ASX24 for R134a & R404a



AVG2  
Digital Vacuum  
Gauge Head



DL2  
Data Logger



EHDL1  
Electronic Handle



HS33  
Stick Meter



HS35  
Stick Meter

# FIELDPIECE INSTRUMENTS

## Specifications

Function	Range	Accuracy/ Resolution	HS33	HS35
Ranging			Manual	Automatic
Counts			2000	4000
Bar Graph				X
VAC	200m	1.2% + 3/0.1m	X	D
	2000m	1.2% + 3/1m		D
	40	1.2% + 3/0.01		X
	200	1.2% + 3/0.1	X	D
	600	2% + 5/1	X	D
VDC	200m	0.5% + 1/0.1m	X	D
	2000m	0.5% + 1/1m	X	D
	20	0.5% + 1/1.01		D
	200	0.5% + 1/0.1	X	D
	600	0.5% + 1/1		X
AAC	200	2.5% + 2	A	A
ADC	400μ	1% + 1/0.1μ		X
	4000μ	1% + 1/1μ		X
°F	200°F	1°F/0.1	X	D
	1000°F	1°F/1		X
MFD	200	3% + 5/0.1m	X	D
Hi-V Indicator		>30V	C	C
NCV		>24VAC	C	C
Ohms	200	1% + 4/00/1	X	D
	4K	1% + 4/1		X
	40K	1% + 4/10		X
	200K	1% + 4/100	X	D
	4M	1.5% + 4/1K		X
	20M	3% + 5/10K		D
Continuity			C	C
Diode			X	X
HZ				X



HS33



HS35

Stick style digital multi meters for comprehensive on the go HVAC&R testing.

### HS33 – HS35

Unique features for HVAC&R

Just snap the head onto the meter or use deluxe silicone leads for remote connection.

- **Non Contact Voltage**
- Loud beeper and bright LED indicate the NCV tab is near AC voltages down to 24 VAC.
- **Auto Ranging HS35**
- Automatically changes range for best resolution
- **Temperature**
- Thermocouple plugs in directly for accurate readings, even in fast changing environments.
- **Micro-amps HS35**
- For flame rectifier diode tests
- **Capacitance**
- For motor-run and motor-start capacitors
- **Frequency HS35**
- For variable frequency drives
- **And many more**

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# FIELDPIECE INSTRUMENTS

## DL2 Data Logger

Measures and records data from Fieldpiece accessory heads

- 20,000 Data points
- Real Time Clock
- Span programmable from 1 sec. to 999 days.
- Period programmable from 1 sec. to 999 hours
- 0.01mV resolution
- LCD output
- Manually scroll to see measurement, time and sequence number.
- Press MIN/MAX/AVG button to automatically to see min, max, and average of current data set.
- Record multiple data sets.
- Downloadable to computer. (Software and cable included)
- Seven days battery life.
- Back light.
- "Tag" the reading with the PARA meter function.  
Add any three characters to the reading for future identification or sorting.  
Using the RECORD button you can add a reading at any time.
- Low Cost
- Easy to use



DL2  
Data Logger

## EHDL1 Electronic Handle

- MIN/MAX to record highest and lowest readings.
- Ranges: 200mVAC, 2000mVAC, 200mVDC 2000mVDC
- Resolution: 0.1mV
- Accuracy DCV:  $\pm(1.2\%rdg + 3 \text{ digits.})$
- Overload Protection: 30VDC or 24VAC



EHDL1  
Electronic Handle

## SC44 Basic Mini Clamp Meter

c/w: ANC4 zippered case, Thermocouple & Silicone Test Leads

- Basic clamp meter with NCV.
- Auto ranging
- 4000 counts
- VAC, VDC, AAC, Ohms, NCV, Continuity & Diode testing



SC44  
Mini Clamp Meter

## ARH4 Digital Psychrometer

Measures air temperature, RH% and dew point wet bulb for getting target superheat from charts.

- Select °F or °C.
- Accuracy:  $\pm 1^\circ @ 0^\circ - 45^\circ\text{C}$ .
- $\pm 2.5\%$  RH, 10% - 90% RH @ 25°C.
- Auto off can be disabled for data logging.



ARH4  
Air Temperature  
& RH% Head

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# FIELDPIECE INSTRUMENTS

## ATH4 Dual Temperature Head

- Two K type thermocouple inputs
- Display T1, T2, or T1-T2
- Field calibration for  $\pm 1^\circ\text{F}$  accuracy
- Display  $^\circ\text{F}$  directly at  $0.1^\circ\text{F}$  resolution on DMM with  $0.1\text{mVDC}$  resolution
- Select  $^\circ\text{F}$  or  $^\circ\text{C}$
- Converts from  $-50^\circ\text{F}$  to  $1800^\circ\text{F}$  ( $-45\text{C}$  to  $980\text{C}$ ) (optional thermocouple required)
- Includes two "wrap tab" thermocouples, plus velcro straps.
- Thermocouples insulated to  $400^\circ\text{F}$  ( $205\text{C}$ )
- Auto-off can be disabled for data logging.



ATH4  
Dual Temperature  
Head

## AAV3 Air Velocity with Temperature Head

### Air Velocity

- Ft/min, meters/sec, MPH, KM/hr
- Range: 80 to 5900ft/min.
- Accuracy:  $\pm 3\%fs + 1\text{digets}$ .

### Temperature

- Displays  $^\circ\text{F}$  and  $^\circ\text{C}$
- Range:  $-4^\circ\text{F}$  to  $140^\circ\text{F}$  ( $-20\text{C}$  to  $60\text{C}$ )
- Accuracy:  $\pm 1^\circ\text{F}$  from  $32^\circ\text{F}$  to  $113^\circ\text{F}$  ( $0\text{C}$  to  $45\text{C}$ )
- Resolution:  $0.5^\circ\text{F}$

Max Operating Temperature  $120^\circ\text{F}$  ( $50\text{C}$ )

Output:  $1\text{mV/unit}$  of measure  
( $1\text{mV}100\text{ft/min}$  above  $2000\text{fpm}$ )



AAV3  
Air Velocity Head

**ASX14 Superheat & Subcooling Head** - for R22 & R410a  
**ASX24 Superheat & Subcooling Head** - for R134a & R404a  
Measures refrigerant pressure, temperature and calculates superheat or subcooling.

- Display pressure in PSI or kPa.
- Display temperature in  $^\circ\text{F}$  or  $^\circ\text{C}$ .
- Display superheat in  $^\circ\text{F}$  or  $^\circ\text{C}$ .
- Display subcooling in  $^\circ\text{F}$  or  $^\circ\text{C}$ .
- Select Refrigerant
- Auto-off can be disabled for data logging
- Includes "T".
- Now accepts K-type thermocouples. ATC1 included.
- LED indicates when readings are stable.
- Thermocouple calibration pot.
- Atmosphere pressure calibration



Superheat & Subcooling  
ASX14 for R22 & R410a  
ASX24 for R134a & R404a

## AUA2 Milli - Micro Amp Head

Measure microamps for flame diode test.

Measure 4 - 20mA control circuits.

- Includes flame diode adaptor
- Max Current:  $200\text{mA AC/DC}$



AUA2  
Milli-Micro Amp Head

Pricing on page 345

# FIELDPIECE INSTRUMENTS

## ATIR3 Infrared Surface Temperature Head

Measures temperature without contact

- 8:1 field of view
- Laser sight included
- Select °F or °C
- Operating ambient temperature 32°F to 122°F (0C to 50C)
- Temperature measurement range 0°F to 752°F (-18C to 400C)
- Accuracy: Whichever is greater.  
At 73°F ± 10°F at <90%RH  
± 2.0%rdg. or 4°F, 32°F to 160°F  
±3.0%rdg.or 5.5°F, 0°F to 31°F  
161°F to 752°F.



ATIR3  
Infrared Surface  
Temperature Head

## ADMN2 Manometer Head

Measure gas pressure and has resolution low enough for static pressure.

- Measures in mBar or WC. (water column).
- 0.01 or 0.1 depending on selected resolution.
- Manual zero-set for comparing two pressures.
- Includes tube and adaptor for gas pressure measurement.
- Auto-off can be disabled for data logging.



ADMN2  
Manometer Head

## AVG2 Digital Vacuum Gauge Head

Displays pressure in microns in steps of one micron.

Has pump down indication showing progress from atmospheric pressure

- Range: 50 to 2000 microns of mercury.
- Resolution (steps): 1 micron of mercury
- Pump down indication: output of head goes from over 3VDC at atmosphere to 2VDC at 2000 microns.
- Overload: 500 PSI
- Fitting: 1/4" flared brass fitting (male)
- Accuracy (73°F ±9°F): ±10%, 0 to 1000 microns, <90%RH
- Straight-in access to sensor for easy cleaning.
- New "T" for inline vacuum testing.
- LEDs indicate increasing, decreasing and stable vacuum.
- Auto-off can be disabled for data logging.



AVG2  
Digital Vacuum  
Gauge Head

## AVH1 Voltage Head

Records voltage using DL2 data logger or EHDL1 handle.

Accuracy; DC ±(0.5%rdg + 1dgt.)

AC ±(1.0%rdg + 4dgts.)

Max voltage: 600V AC or DC

Input impedance: 1M Ohm

Standard test leads plug in top



AVH1  
Voltage Head

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# FIELDPIECE INSTRUMENTS

## ACH4 Current Clamp Head

Measures to 400VAAC

- Current range: 1A to 400A
- Accuracy:  $\pm 1.5\%$ rdg +1digets.
- Maximum conductor size: 23mm (0.91ins)



ACH4  
Current Clamp  
Head

## ADLS2 Silicone Test Leads

- High copper stranding, silicone insulated test leads.
- Removable probe tips
- Basket style strain relief
- Fit in test lead holders on back of SC series clamp meters and HS30 series stick meter



ADLS2  
Silicone Test Leads

## AHDL1 Accessory Head Adaptor

- Connects any Fieldpiece accessory head to any digital multimeter with industry standard jacks



AHDL1  
Accessory Head Adaptor

## ATC3 Pipe Clamp Thermocouple

Pipe clamp up to 13/8"

- K Type thermocouple with one meter of lead.
- No longer need three hands to do the job.
- Providing fast accurate readings from a positive surface contact
- 200°F (95C) Max temperature



ATC3  
Pipe Clamp Thermocouple

## ATA1 Thermocouple

- Bead type with alligator clip
- Max Temperature 205°C - 400°F



ATA1  
Thermocouple

## ATF1 Thermocouple

- 6" Stainless steel tip for fluids
- Maximum temperature 815°C - 1500°F



ATF1  
Thermocouple

## ANC1 Carry Case

- Soft sided carry case
- 4 pockets, 1 meter + 2 heads



ANC1  
Carry Case

## ANC8 Carry Case

- Soft sided carry case
- 4 pockets, 2 meter + 2 heads



ANC8  
Carry Case

Pricing on page 345

# FIELDPIECE INSTRUMENTS

## HB74K13 Basic Field Pack

- Includes HB74 meter with rubber holster
- ACH4 400AAC accessory clamp
- ADLS2 silicone leads
- ASA2 alligator clips
- AHDL1 adaptor handle
- ANC1 four pocket carry case



HB74K13  
Basic Field Pack

## LT Digital Multimeters

Function	Range	Accuracy/Resolution	HB74	LT16A	LT17B	LT83A
VAC	200m	1.5% + 4/0.1	X	X	X	X
	2000m	1.5% + 4/1.0	X	X	X	X
	20	1.2% + 4/0.01	X	X		X
	200	2% + 4/0.01	X	X	X	X
	600	2% + 4/0.1	X	X	X	X
VDC	200m	0.5% + 1/0.1	X	X	X	X
	2000m	0.5% + 1/1.0	X	X	X	X
	20	0.5% + 1/0.01	X	X	X	X
	200	0.5% + 1/0.1	X	X	X	X
	600	0.5% + 1/1.0	X	X	X	X
AAC	200μ	1.5% + 5/0.1	X	X	X	X
	2m	1.5% + 5/0.001				X
	20m	1.5% + 5/0.01		X	X	X
	200m	1.5% + 5/0.1	X	X		X
	2	3% + 5/0.001		X		
	10	3.5% + 4/0.01	X			X
	20	3.5% + 3/0.01	X			
ADC	400*	4.5% + 5/0.1	X	X	X	X
	20μ	1% + 1/0.01	X			
	200μ	1% + 1/0.1	X	X	X	X
	2m	1% + 1/0.001				X
	20m	1% + 1/0.01		X	X	X
MFD	200m	1% + 1/0.1	X	X		X
	2	2.5% + 1/0.001		X		
	10	2% + 3/0.01	X			X
	20	4% + 10/0.01	X			
	200	4% + 10/0.1	X	X	X	
	2k	4% + 10/0.001	X	X	X	
	20k	4% + 10/0.01	X	X	X	
Ohms	200	1% + 4/0.1	X	X	X	X
	2k	1% + 4/0.001	X	X		X
	20k	1% + 4/0.01	X			X
	200k	1% + 4/0.1	X	X	X	X
	2M	1% + 4/0.001				X
	20M	2% + 4/0.01	X	X	X	X
	200M	2% + 4/0.01				X
	2000M	5% + 10/1.0		X		
°F	200	1°F/0.1 (32 – 120°F)			X	
	1000	1% + 1.5°F/1			X	
Hi-V			X			
Phase Rotation			X	X		
Frequency			X	X	X	
Continuity			X	X	X	X
Diode			X	X	X	X
Ranging			MANUAL	MANUAL	MANUAL	MANUAL
Counts			2000	2000	2000	2000
Backlight				X	X	X
True RMS				X		



LT16A



LT17



LT83A

\* With the ACH4

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# FIELDPIECE INSTRUMENTS

## Fieldpiece Prices

Airefrig Part Number	Description	List Price Excl GST
AAV3	Air Velocity with Temperature Head, Range 80 to 5900ft/min	\$491.85
ACH4	Current Clamp Head, Range 1A to 400A	\$95.82
ADLS2	Deluxe Silicone Test Leads with Removable Probes	\$52.50
AHDL1	Accessory Adaptor Handle, Connects any Head to Digital Multimeters with industry standard jacks	\$46.05
ADMN2	Manometer Head – Gas and Static Pressure	\$326.66
ANC1	Carry Case – 1 Meter & 2 Heads	\$49.83
ANC8	Carry Case – 2 Meters & 4 Heads	\$97.91
ARH4	Temperature & Relative Humidity Head & Dew Point, 0-45C, 10-90%RH	\$294.00
ASX14	Superheat & Subcooling Head – Refrigerant R22 & R410A	\$798.33
ASX24	Superheat & Subcooling Head – Refrigerant R134A & R404A	\$798.30
ATA1	K Type Thermocouple with Alligator Clip	\$49.41
ATBF1	K Type Thermocouple Bead 480 Deg C Insulation	\$76.55
ATC3	K Type Thermocouple Adjustable Pipe Clamp	\$327.50
ATF1	K Type Thermocouple Stainless Steel Pointed	\$108.93
ATH4	Dual Temperature Head, Display T1, T2 or T1-T2	\$258.23
ATIR3	Temperature Head Infrared, Laser light included, F or C Range –18C to 400C	\$232.50
AUA2	Milli – Micro Amp Head 4 – 20 mA, Max Current 200mA AC/DC c/w flame diode adaptor	P.O.A.
AVG2	Digital Vacuum Gauge Head , Range 50 to 2000 microns of mercury	\$414.84
AVH1	Voltage Head, Max voltage 600V AC or DC	\$75.00
DL2	Data Logger with PC software and RS cable	\$657.50
EHDL1	Electronic Handle, Converts accessory heads into stand-alone instrument.	\$82.36
HB74K13	Meter Kit – HB74 Meter, ACH4 Head, ADLS2 Leads, AHDL1 Adaptor, ANC1 Carry Case	\$689.90
HS33	Stick Meter VAC, VDC, MFD, Ohms, Diode, Temp	\$481.66
HS35	Stick Meter VAC, VDC, MFD, Ohms, Diode, Temp, Hz	\$581.66
LT16A	Digital Multimeter, Ohms, Amps, Rotation, Hz, MFD	\$458.33
LT17	Digital Multimeter, Ohms, Amps, Rotation, Hz, MFD, Temp	\$392.81
LT83A	Digital Multimeter, Ohms, Amps, Rotation, Hz, MFD, Data hold	\$188.32
SC44	Mini Combination Clamp Meter	\$226.57
SPDM1	Digital Pocket Multimeter	\$110.00
RF16	Fuses (4) 0.1A/250V 5 x 20mm suit LT16, LT17	\$9.56
RFL83	Fuses (4) 10A/600V 6.35 x 25.4mm suit LT83	\$9.56
RFM66	Fuses (4) 0.25A/700V 6.35 x 32mm suit SC66, SC77	\$49.17
RFM70	Fuses (4) 2A/600V 6.35 x 25.4mm suit LT16	\$9.56
RFM74	Fuses (4) 500mA/500V 6.35 x 32mm suit LT17	\$24.08
RFS74	Fuses (4) 0.5A/250V 5 x 20mm suit HB74, LT83	\$12.90