

## DIGITAL CLAMP METER - CPS

### CPS Digital Clamp Meter

Airefrig Part Number	Description	List Price Ex GST
AC750	Digital Clamp Meter	\$336.00

#### Item Description:

The AC750 is a Multi-Functional AC/DC Clamp Meter. The AC750 hosts an array of enhanced features such as the ability to capture True Inrush measurements, Non-Contact Voltage Detection and Data Logging your output readings to a PC (USB Connection cable included).

#### Key Features:

- Versatile for testing AC/DC voltage, AC/DC current, resistance and frequency
- True RMS AC measurement
- Max./Min. value measurement
- Audible continuity and diode test
- Non-contact voltage detection
- Integrated clamp light and LCD backlight
- Auto zero key for DCA measurement
- Auto/Manual range, auto power off
- Secondary injection molded case, safety as per IEC1010 CAT.III 600V



## MULTIMETER - FIELDPIECE

### Fieldpiece Digital Pocket Multimeter

Airefrig Part Number	Description	List Price Ex GST
SPDM1	Digital Pocket Multimeter	\$85.05

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

## MEGAOHM METER - FIELDPIECE

### Fieldpiece SMG5 Megohm Meter

Airefrig Part Number	Description	List Price Ex GST
SMG5	Megohm Meter – 1000VDC up to 2000Mohms	\$313.89

SMG5 Megohm Meter is a low cost meter for checking compressor insulation.

- Predict compressor failure
- 1000VDC stresses insulation to measure up to 2000Mohms
- Backlit LCD display
- Auto-off to extend battery life
- Case, alligator clip, leads with removable tips



# FIELDPIECE INSTRUMENTS

## HS30 Series Head Attachments

Note: Prices on last page of Fieldpiece Information



**ATH4**  
Dual-Temperature  
Accessory Head



**AUA2**  
Milliamps & Microamp  
Accessory Head



**ADMN2**  
Dual-Port Manometer  
Accessory Head



**ATIR3**  
Non-contact Infrared  
Temperature  
Accessory Head



**AAV3**  
Anemometer Air Velocity  
and Temperature  
Accessory Head



**ARH5**  
In-Duct Psychrometer  
Accessory Head



**AVH1**  
AC/DC Voltage  
Accessory Head



**ACH4**  
400A Amp Clamp  
Accessory Head



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



**AVG2**  
Digital Vacuum Gauge  
Accessory Head



**DL3**  
Expandable HVAC/R  
Data Logger



**EHDL1**  
Electronic Handle Converts  
any Fieldpiece accessory  
head into a standalone meter



**HS33**  
Expandable Manual  
Ranging Stick Multimeter  
for HVAC/R



**HS36**  
Expandable  
Autoranging True  
RMS Stick Multimeter  
w/ Backlight

# FIELDPIECE INSTRUMENTS

## Stick Multimeter Specifications (for use with either multiple heads or silicon leads)

Function	Range	Accuracy/ Resolution	HS33	HS36
Ranging			Manual	Automatic
Counts			2000	4000
AC Conversion			Average	True RMS
Backlight			-	yes
Bar Graph			-	yes
VAC	200m	1.2% + 5/0.1m	*A	*C
	2000m	1.5% + 5/1m	-	*C
	40	1.5% + 5/0.01	-	yes
	200	2% + 5/0.1	yes	*C
	600	2% + 5/1	yes	*C
VDC	200m	0.5% + 2/0.1m	yes	*C
	2000m	0.5% + 2/1m	yes	*C
	20	0.5% + 2/0.01	-	*C
	200	0.5% + 2/0.1	yes	*C
	600	0.5% + 2/1	-	yes
AAC	20	2.7% + 7/0.1	*A	*A
	100	3.7% + 8/0.1	*A	*A
	400	5.0% + 10/1	*A	*A
ADC	400μ	1% + 2/0.1μ	-	yes
	4000μ	1% + 2/1μ	-	yes
°F	200°F	1°F/0.1	yes	C
	1000°F	1°F/1	-	yes
MFD	200	3% + 5/0.1m	yes	C
Hi-V Indicator		>30V	*B	*B
NCV		>24VAC	*B	*B
Ohms	200	1% + 4/0/1	yes	*C
	4K	1% + 4/1	-	yes
	40K	1% + 4/10	-	yes
	200K	1% + 4/100	yes	*C
	4M	1.5% + 4/1K	-	yes
	20M	3% + 5/10K	-	*C
Continuity			*B	*B
Diode			yes	-
HZ			-	yes
*A = With ACH4 clamp head      *B = LED and beeper      *C = Range is 40XX, not 20XX				



HS33  
Expandable Manual  
Ranging Stick Multimeter  
for HVAC/R



HS36  
Expandable  
Autoranging True  
RMS Stick Multimeter  
w/ Backlight

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

### HS33 – HS36

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 HS36**  
Automatically changes range for best resolution
- **Temperature**  
Thermocouple plugs in directly for accurate readings, even in fast changing environments.
- **Micro-amps HS36**  
For flame rectifier diode tests
- **Capacitance**  
For motor-run and motor-start capacitors
- **Frequency HS36**  
For variable frequency drives
- **And many more**

Note: Prices on last page of Fieldpiece Information

# FIELDPIECE INSTRUMENTS

## DL3 Expandable HVAC/R Data Logger

Measures and records any parameter from any Fieldpiece accessory head connected to it.

- Record data points manually, automatically or trigger to log outside range
- Realtime clock: second, minute, hour, day, month and year
- All data points are time stamped
- Multiple data sets of various parameters can be stored
- Easy downloading to PC
- Cost-Effective, multi-channel recording using multiple DL3 data loggers 20000 data points
- Combine with the AAV3 Anemometer to easily determine CFM



DL3  
Data Logger

## EHDL1 Electronic Handle Converts any Fieldpiece accessory head into a standalone meter

- 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

## SC45 Basic Mini Clamp Meter

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

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



SC45  
Mini Clamp Meter

## SC56 True RMS Swivel Head Clamp Meter

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

- 180 Degree swivel head
- Inrush current
- Dual Display (backlight)
- True RMS
- Auto or manual ranging



SC56  
True RMS Swivel Head  
Clamp Meter

## ARH5 In-Duct Psychrometer Accessory Head

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

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



ARH5  
In-Duct Psychrometer  
Accessory Head

Note: Prices on last page of Fieldpiece Information

# FIELDPIECE INSTRUMENTS

## ATH4 Dual-Temperature Accessory 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  
Accessory Head

## AAV3 Anemometer Air Velocity and Temperature Accessory Head

### Air Velocity

- Ft/min, meters/sec, MPH, KM/hr
- Range: 80 to 5900ft/min.
- Accuracy:  $\pm 3\%fs + 1$ 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  
Anemometer Air Velocity  
and Temperature  
Accessory 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



ASX14 or ASX24  
Superheat &  
Subcooling Head

## AUA2 Milliamps & Microamp Accessory Head

Measure microamps for flame diode test.  
 Measure 4 - 20mA control circuits.

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



AUA2  
Milliamps & Microamp  
Accessory Head

Note: Prices on last page of Fieldpiece Information

# FIELDPIECE INSTRUMENTS

## ATIR3 Non-contact Infrared Temperature Accessory 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  
Non-contact Infrared  
Temperature Accessory Head

## ADNM2 Dual-Port Manometer Accessory 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.



ADNM2  
Manometer Head

## AVG2 Digital Vacuum Gauge Accessory 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 Accessory  
Head

## SVG2 Digital Stand Alone Vacuum Gauge

- Measures from 50-2000 microns.
- Auto off when left in Atmospheric pressure.
- High and low alarm that notifies user when the desired vacuum has been reached with bright red LED and audible alarm.
- Vacuum indicators notifies user if vacuum is decreasing, stable or increasing in pressure
- Fast response and high resolution Accuracy +/- 10 microns from 50 to 1000 microns.
- Rubber boot protection with magnetic hanger.



SVG2 Digital  
Vacuum Gauge

## AVH1 AC/DC Voltage Accessory Head

Records voltage using DL2 data logger or EHDL1 handle.

Accuracy; DC ±(0.5%rdg + 1dgt.)

AC ±(1.0%rdg + 4dgt.)

Max voltage: 600V AC or DC

Input impedance: 1M Ohm

Standard test leads plug in top



AVH1  
Voltage Head

Note: Prices on last page of Fieldpiece Information

# FIELDPIECE INSTRUMENTS

## ACH4 Current Clamp Accessory Head

Measures to 400VAAC

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



400A Amp Clamp  
Accessory Head

## SRH3 Diagnostic Psychrometer (Stand-alone Meter) with Target Superheat

Fully loaded diagnostic psychrometer. Use on Fixed Orifice Systems for the quickest way to check your "Target" Superheat on capillary systems by measuring the *outdoor* dry bulb temperature and the *indoor* wet bulb temperature

- For temperature measurements select built-in thermistor on a telescopic wand.
- Measures Wet bulb temp, dry bulb temp, dew point temp and %RH
- Target Evap. Exit Temp and Target Superheat for "Fixed Orifice Systems"
- Calculate target superheat and target evaporator exit temperature
- Rubber boot protection with magnetic hanger strap

SRH3  
Diagnostic  
Psychrometer



## ADLS2 Deluxe 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 Electronic Handle

Converts any Fieldpiece accessory head into a standalone meter

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

AHDL1  
Accessory Head  
Adaptor



## ATA1 Bead Tip K-Type Thermocouple with Alligator Clip

- Bead type with alligator clip
- Temperature Range -46 to 204°C



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

Note: Prices on last page of Fieldpiece Information

# FIELDPIECE INSTRUMENTS

## LT Digital Multimeters

Function	Range	Accuracy / Resolution	LT16A	LT17A	LT83A
AC Voltage (50hz to 500hz)	200m	1.5% + 5/0.1	X	X	X
	2000m	1.5% + 5/1.0	X	X	X
	20	1.5% + 5/0.01	X	X	X
	200	2% + 5/0.1	X	X	X
	600	2% + 5/1.0	X	X	X
DC Voltage	200m	0.5% + 1/0.1	X	X	X
	2000m	0.5% + 1/1.0	X	X	X
	20	0.5% + 1/0.01	X	X	X
	200	0.5% + 1/0.1	X	X	X
	600	0.5% + 1/1.0	X	X	X
AC Current (* Using the ACH4 current clamp)	200μ	1.5% + 5/0.1	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
	20*	3.0% + 7/0.01	X	X	X
	100*	4.0% + 8/0.01	X	X	X
DC Current	200μ	1% + 1/0.1	X	X	X
	2m	1% + 1/0.001			X
	20m	1% + 1/0.01	X	X	X
	200m	1% + 1/0.1	X	X	X
	2	2.5% + 1/0.001	X		
	10	3% + 3/0.01			X
Capacitance (MFD)	200	4% + 10/0.1	X	X	
	2k	4% + 10/0.001	X	X	
	20K	4% + 10/0.01	X	X	
Resistance (Ohms)	200	1% + 4/0.1	X	X	X
	2k	1% + 4/0.001	X	X	X
	20k	1% + 4/0.01			X
	200k	1% + 4/0.1	X	X	X
	2M	1% + 4/0.001			X
	20M	3% + 4/0.01	X	X	X
	200M	2% + 4/0.1			X
Temperature (K-Type Sensor)	200	1°F/0.1 (32 – 120°F)		X	
	1400	3% + 7/1.0		X	
Battery Check	1.5V	3.5% + 2/0.01			X
True RMS			X		
Phase Rotation			X		
Frequency Autoranging			X	X	
Continuity			X	X	X
Diode Test			X	X	X
Backlight			X	X	X
Supplied with:	ACH4 – 400AAC current clamp		X	X	
	ADLS2 – Deluxe silicone test leads		X	X	X
	ANC5 – Padded pouch case		X	X	
	ASA2 – Short leads with alligator clips		X	X	
	ATB1 – K-Type bead thermocouple			X	
	ASV6 – Velcro thermocouple pipe straps			X	
	Yellow short lead with alligator clips		X		



LT16A



LT17A



LT83A

Note: Prices on last page of Fieldpiece Information



# FIELDPIECE INSTRUMENTS

## Fieldpiece Prices

Airefrig Part Number	Description	List Price Excl GST
AAV3	Anemometer Air Velocity and Temperature Accessory Head, Range 80 to 5900ft/min	\$293.64
ACH4	Current Clamp Accessory Head, Range 1A to 400A	\$103.29
ADLS2	Deluxe Silicone Test Leads with Removable Probes	\$53.67
ADMN2	Dual-Port Manometer Accessory Head	\$432.24
AHDL1	Accessory Adaptor Handle, Connects any Head to Digital Multimeters with industry standard jacks	\$39.48
ANC1	Carry Case – 1 Meter & 2 Heads	\$41.52
ANC8	Carry Case – 2 Meters & 4 Heads	\$83.04
ARH5	In-Duct Psychrometer Accessory Head (RH% & Temperature)	\$342.24
ASX14	Superheat and Subcooling Accessory Head for Air Cond – Refrigerant R22 & R410A	P.O.A.
ASX24	Superheat and Subcooling Accessory Head for Refrigeration – Refrigerant R134A & R404A	P.O.A.
ATA1	K Type Thermocouple with Alligator Clip	\$44.55
ATBF1	K Type Thermocouple Bead 480 Deg C Insulation	\$56.19
ATF1	K Type Thermocouple Stainless Steel Pointed	\$129.60
ATH4	Dual Temperature Accessory Head, Display T1, T2 or T1-T2	\$198.45
ATIR3	Temperature Head Infrared, Laser light included, F or C Range –18C to 400C	\$192.39
AUA2	Milliamps & Microamp Accessory Head	\$82.01
AVG2	Digital Vacuum Gauge Head , Range 50 to 2000 microns of mercury	\$269.34
AVH1	AC/DC Voltage Accessory Head, Max voltage 600V AC or DC	P.O.A.
DL3	Data Logger Modular Base Unit (Expandable HVAC/R Data Logger)	\$550.80
EHDL1	Electronic Handle, Converts accessory heads into stand-alone instrument.	\$76.95
HS33	Stick Meter VAC, VDC, MFD, Ohms, Diode, Temp	\$411.09
HS36	Stick Meter Auto Ranging, VAC, VDC, Continuity, Ohms, Diode, Temp, Hz, DC microAmps	\$627.75
LT16A	Digital True RMS Multimeter Kit with Phase Rotation	\$405.00
LT17A	Digital Multimeter Kit with K-Type Temperature Probe	\$362.49
LT83A	Digital Multimeter (basic)	\$186.30
RF16	Fuses (4) 0.1A/250V 5 x 20mm suit LT16, LT17	\$18.21
RFL83	Fuses (4) 10A/600V 6.35 x 25.4mm suit LT83	\$14.19
RFM66	Fuses (4) 0.25A/700V 6.35 x 32mm suit SC66, SC77	\$50.64
RFM70	Fuses (4) 2A/600V 6.35 x 25.4mm suit LT16	\$30.36
RFM74	Fuses (4) 500mA/500V 6.35 x 32mm suit LT17	P.O.A.
RFS74	Fuses (4) 0.5A/250V 5 x 20mm suit HB74, LT83	\$16.28
SC45	Mini Combination Clamp Meter with Temperature for HVAC/R	\$222.75
SC56	True RMS Swivel Head Clamp Meter calculates ac/dc volts, ac/dc current, diode testing capacitance temperature	\$603.45
SPDM1	Digital Pocket Multimeter	\$85.05
SRH3	Diagnostic Psychrometer (Stand-alone Meter) with Target Superheat	\$469.80
SVG2	Digital Stand Alone Vacuum Gauge , Range 50 to 2000 microns of mercury	\$409.05