# Helping you work professionally

# **OUR COMMITMENT**

SAFTEC's mission is to be the leader in quality professional electrical, electronic & engineering tools, toolkits and test equipment. The company carries an in-depth inventory of a selection of top brandname products used by Technicians and Engineers in service, installation, maintenance, manufacturing and quality assurance functions in a wide spectrum of industries.

SAFTEC founded in 1979, has achieved an enviable reputation for delivering on its stated aim: "Helping you to work professionally." Indeed, our customer's needs are our first priority and we are committed to providing the answer to your needs, faster, more efficiently and cost effectively than ever thought possible.



# An invitation

Please accept this as a personal invitation to view the extensive range of tools, toolkits, test equipment, service items and industrial components on display in our newly acquired premises. Alternatively our Sales Engineers would welcome the opportunity to visit you and assist you in selecting the right tools to help you to work professionally!

# INDEX

The same	PAGE
TOOLKITS & CASES	1-3
SCREWDRIVERS & SPANNERS	4-6
CUTTERS, PLIERS, STRIPPERS & TWEEZERS	7-8
CRIMPING TOOLS	9
SOLDERING & DESOLDERING	10-11
SOLDERING AIDS	12
GAS SOLDERING/ general/ POWER TOOLS	13
AEROSOL & ADHESIVE MAINTENANCE PRODUCTS	14
STATIC CONTROL	15
TEST EQUIPMENT	16-17
TORCHES, MULTI-FUNCTION PLIERS & MINI SOCKET SETS	18
INDUSTRIAL SUPPLIES & EQUIPMENT	19-20
INDUSTRIAL COMPONENTS COOLING FANS INDUSTRIAL	57
COOLING FANS, INDUSTRIAL BUZZERS, MINIATURE LAMPS & INSERTS & STANDOFFS	21



# **JOHANNESBURG**

Unit 27, N12 Industrial Park Dr Vosloo Drive, Bartlet Tel: 011 918-8080 Fax: 011 918-8090

# CAPE TOWN

Unit 42, Woodbridge Business Park, Koeberg Road Tel: 021 551-2535 Fax: 021 551-6378



# PROFESSIONAL TOOLKITS & CASES

**Electronics** 



ELECTRONIC ENGINEERS, FIELD SERVICE ENGINEERS, ELECTRICIANS & DATACOMS TOOLKITS



ZII DAG TOOLKITS



ZIP BAGS ARE MADE FROM TOUGH CORDURA WITH HEAVY DUTY ZIPS









# **ECONOMY TOOLKITS**

**Economy Electronic** 



Maintenance **Trainee Toolkits** 



# **MECHANICAL & PLUMBING TOOLKITS**





**Starter Mechanical** 



**Apprentice Engineer** 



Mechanical



**Plumbing** 



OR LET US DESIGN A PROFESSIONAL TOOLKIT TO SUIT YOUR REQUIREMENTS



# STANDARD TOOL SELECTIONS

STANDARD FOAM CUT-OUTS AVAILABLE FOR EACH OF THESE TOOL SELECTIONS

























# **CASE OPTIONS**



ASSORTED LID AND BASE PALLETS AVAILABLE



# SCREW DRIVERS, NUT DRIVERS, TORX DRIVERS & HEX DRIVERS

# 0

PBB 81005

# **) PB** SwissGrip®

PB SwissGrip® screwdrivers with their soft handle surface effortlessly transfer the rotational forces of the hand to the screw. They are particularly appreciated in places where problem-free, non-tiring work is a requirement, in the high-tech sector, on assembly lines or DIY. The casing which is made of skin friendly Santroprene®, gives a soft, warm feel to the handle. It encloses the entire surface of the handle and therefore guarantees the best possible contact between the skin and the soft component. The special structure means that a secure grip is ensured even if hands are wet.



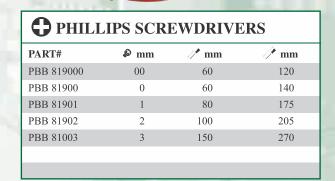


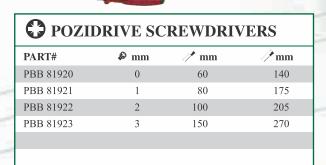
<b>()</b> FLAT SCREWDRIVERS					
PART#	_=_ mm	¦⊑, mm	🥕 mm	∕∕mm	
PBB 81000	2,5	0,4	80	160	
PBB 81001	3,5	0,5	90	180	
PBB 81002	4,0	0,6	100	195	
PBB 81003	5,5	0,8	120	220	
DDD 91004	6.5	1.0	140	245	

1,2

160

270





PART#	₩ TX	🥕 mm	🧷 mm
PBB 84003	3	40	117
PBB 84004	4	40	117
PBB 84005	5	50	127
PBB 84006	6	50	127
PBB 84007	7	50	127
PBB 84008	8	60	60
PBB 84009	9	60	140
PBB 840010	10	70	160
PBB 840015	15	80	175
PBB 840020	20	100	200
PBB 840025	25	120	225
PBB 840027	27	125	230
PBB 840030	30	130	240
PBB 840040	40	140	260

O HEX/ALLEN SCREWDRIVERS				
PART#	O mm	∕∕* mm	∕∕ mm	
PBB 8205071	0,71	40	117	
PBB 8205089	0,89	40	117	
PBB 8205127	1,27	50	127	
PBB 820515	1,5	70	147	
PBB 82052	2	80	157	
PBB 820525	2,5	90	170	
PBB 82053	3	100	180	
PBB 82054	4	120	220	
PBB 82055	5	140	245	
PBB 82056	6	160	270	
PBB 82058	8	180	300	



# **Quick Identification**

One glance and you quickly have the right tool in your hand. The integral cast-in screw symbol and additional colour coding enable you to quickly identify the type of screwdriver.





HEX/ALLEN SCREWDRIVERS, BALLPOINT				
PART#	O mm	∕∕* mm	∕∕r mm	
PBB 8206S127	1,27	50	127	
PBB 8206S15	1,5	70	147	
PBB 8206S2	2	80	157	
PBB 8206S25	2,5	90	167	
PBB 8206S3	3	100	180	
PBB 8206S4	4	120	210	
PBB 8206S5	5	140	235	
PBB 8206S6	6	160	260	
PBB 8206S8	8	180	280	

● NUT	DRIVER	SCREWD	RIVERS
PART#	<i>▶</i> mm	∕∕* mm	∕∕r mm
PBB 82004	4	70	150
PBB 820045	4,5	80	170
PBB 82005	5	85	180
PBB 820055	5,5	90	190
PBB 82006	6	90	195
PBB 82007	7	100	205
PBB 8200S8	8	120	230
PBB 8200S9	9	140	250
PBB 8200S10	10	160	270
PBB 8200S11	11	180	300
PBB 8200S12	12	190	310
PBB 8200S13	13	200	320







PB Electro Tool® handles combine the popular slender shape of the PB Classic handle with the non-slip grip of the PB SwissGrip® material. These VDE-tested tools ensure the safety not only of professional users in the electrical industry but also private users. The basic round shape with conical handle neck is especially suitable for fast turning and making fine adjustments. The ergonomic groves and pleasant, easy-to-grip surface of the soft component used, makes a high level of manual torque possible, as well as long, non-tiring work sessions. Available in all standard sizes & profiles.

PB ELECTRO-TOOL 1000V

VDE SCREW DRIVERS

# PB SETS

# PBB 8244C SWISSGRIP



## 6 Piece screwdriver set.

- $\bullet Includes wall rack.\\$
- •Flat3.5,4,5.5,6.5mm.
- •PhillipsPH1&PH2.

# PBB 5542 ELECTRO-TOOLS



1000V VDE, 6 Piece screwdriver set.

- •Flat 3.5, 4, 5.5, 6.5mm.
- •Phillips PH1&PH2.

# PBB 1620C Electronic



- 4 Piece electronic screwdriver set.
- •Flat 2.0mm & 2.5mm.
- •Phillips PH00&PH0.

# **OTHER PB PRODUCTS**

# COLOUR CODED HEX/ALLEN KEY SETS



- •Metric&Imperial.
- •StandardorBallpoint.
- •Quickrecognitionofsizes by means of colours.

# MAGNETISER & DEMAGNETISER



# **HOOKS**



**HOSE PLUCKER** 

# **SCRIBER**



TUNGSTEN CARBIDE TIP



# SCREWDRIVERS, 1/4" BITS, HEX KEYS & PRECISION DRIVERS

# NEON S/DRIVERS CERAMIC TRIMMERS



FOLD OUT HEX KEY SETS INOMIC PLIERS



BALLPOINT HEX KEY SETS METRIC/IMPERIAL



GRIPPER SOCKET SET 3/8 DRIVE METRIC/IMPERIAL



\_

SOFT FINISH, 2 PIECE HANDLE DRIVERS



# SOFT FINISH, VDE SCREWDRIVERS



# 1/4" SCREWDRIVER BITS



# PICO FINISH PRECISION DRIVERS



# (GEDORE)





**SOCKET SET** 



# **TOOLKIT**





# CUTTERS & PLIERS

# **KNIPEX®**

KNIPEX® specialises in development and production of high-quality pliers and is Europe's leading manufacturer of these products. KNIPEX® products are designed to meet the requirements of professional users, who must be able to rely on their tools in day-to-day work.

## **COMBINATION PLIERS**



- •Specialtoolsteel,oilhardenedandtempered.
- •Longcuttingedgesforthickercables.
- •Cuttingedgehardnessapprox.60HRC.
- •Availableinsizes140,160,180,200&250mm.

## WIRE STRIPPERS



- •Forsingle, multiple & finestranded conductors.
- •Easyadjustment.
- •Specialtoolsteel,oilhardenedandtempered.

## LONG NOSE PLIERS



- Highlyloadable, elastic precision points.
- •Serratedgrippingsurface.
- ${\bf C} utting edge formed ium hardwire and additionally induction hardened.}$
- Bentorstraight.

# CIRCLIP PLIERS - INTERNAL & EXTERNAL



- ·Straight&bent.
- ·Solidstyleforged.
- •Non-sliptips.
- •Chromevanadiumelectricsteel,oilhardened.
- •Forcirclipsupto400mmindiameter.

## SIDE CUTTERS



- •Precisioncuttingedgesforsoftandhardwire.
- ·Cleancutting.
- •Cuttingedgehardnessapprox.62HRC.
- ·Narrowheadstyle.
- •Availableinsizes110-250mm.

## WATER PUMP PLIERS



- ${\bf \cdot} Gripping surfaces with special hardened teeth approx. 61 HRC.$
- •Boxjointdesignhighstability.
- •180-560mm.

# **ELECTRONIC PLIERS & CUTTERS**

# **ROUND NOSE 115mm 3532115**



# FLAT NOSE 115mm 3512115



# BENT NOSE 115mm 3542115



# LONG NOSE 145mm 3562145



# OBLIQUE CUTTER 120mm, 6212120



END CUTTER 6462120



# SIDE CUTTER 115mm 7702115



SIDE CUTTER SHARP NOSE 7732115







# **CUTTERS**

# 170-II MICRO-SHEAR® **FLUSH CUTTER**



# 475 XURO-GRIP® SHORT **NOSE PLIERS**

•Highcarbonsteel for strength and extraslimprofileto allow access in high density areas. Jaws have rounded backs for forming operations. The strength to crimp a lead wire with the precision to grasp and hold human hair.

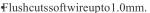
# 2175 MAXI-SHEAR<sup>TM</sup> FLUSH **CUTTER**

·Atough6"wire cutter featuring ourpatentedMicro-Shear® cutting action. Tough enough for harnesses and cables with the precision to cut material less than 1mm thick or work in high density areas.

Flushcutssoftwireupto 1.6mm.

# LX MICRO-SHEAR® FLUSH CUTTER

•OurpatentedMicro-Shear®cuttingaction combined with precision ground cutting edges, extratough high carbon steel blades, an ultra slim profile for access to high density areas and the same enhanced ergonomic shape as ouroriginalLX-81.



## 410 MICRO-SHEAR® FLUSH CUTTER

 The premium gradeversion of our worldfamous170-IIMicro-Shear®flush cutter. Its size and shape are optimized for work in high density areas. Their patented Micro-Shear®bladeby-passreducesboth cutting effort and mechanical shock impact transmitted to the component.



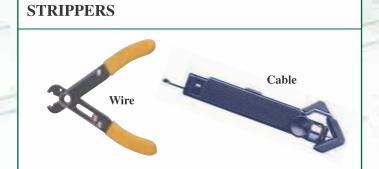




# STRIPPERS & TWEEZERS

# STRIPMASTER AUTOMATIC



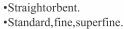


# **COAX CABLE STRIPPERS**



- ·Streamlineddesign.
- •PresetforcableRG58/59/6.
- ·Easilyadjustable.

# **TWEEZERS**



- Stainless, plastic, ceramic.
- •SMD, conventional.





# **CRIMPING TOOLS**

# HTH 336A COAXIAL/BNC/HEX



**CRIMP:** BNC/COAX/HEX(1.72,5.41,6.50).

**CABLE SIZE:** RG58,59,62.

R atchet with pressure adjustment.

# **HTH 336G FIBRE OPTIC**

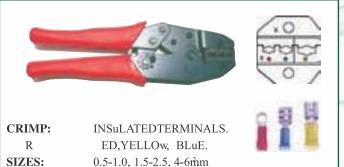


**CRIMP:** BNC/COAX/HEX/FIBREOPTIC.

(1.09, 1.72, 2.54, 3.48, 5.41, 6.48).

CABLE SIZE: RG58,59,62,174,Fibre optic.

# **HTH 236H INSULATED TERMINALS**



Ratchet with pressure adjustment.

# HTH 568R DUAL MODULAR



**CRIMP:** MODuLARPLuGS.

8P8C/6P6C/6P4C.

CAPACITY: RJ45,RJ12,RJ11.

Ratchet, cuts, strips & crimps.

# HTH 336K COAXIAL/BNC/HEX



**CRIMP:** BNC/COAX/HEX(2.54,3.25,10.9).

**CABLE SIZE:** RG8,11,174,179,213.

R atchet with pressure adjustment.

# HTH 2008R PRO. MODULAR



CRIMP: MODuLARPLuGS.

8PBC, 6P6C, 6P4C, 4P2C.

CAPACITY: RJ45,RJ12,RJ11.

R atchet, cuts, strips & crimps.

# HTH 236C NON INSULATED TERMINALS





**CRIMP:** NONINSuLATEDTERMINALS.

Locking0.5-1.0,1.5-2.5,4-6mm

**SIZES:** A wG20-18,16-14,12-10.

R atchet with pressure adjustment.

# **HTH 236E BOOTLACE**







**CRIMP:** BOOTLACETERMINALS.

**SIZES:** 0.5 - 4.00mm

R atchet with pressure adjustment.



# SOLDERING & DESOLDERING

# WD1/WD1000 DIGITAL SOLDER STATION



- •Themicroprocessorcontrolledsolderingstation wD1/w D1000ispartofageneration of devices which were developed for industrial production technology including repair and laboratory areas.
- Youcanextendthefunctionality diversity of this unit with USB interface for ISO application for calibration, configuration and precise measured values.
- ·Leadfreeready.
- wD2-hastheabilitytocontroltwo80w soldering irons at the same time or one soldering ironof150w.

# WS81 SOLDER STATION



# WTCP51 SOLDER STATION



# 230V LINE VOLTAGE IRONS



# **WSP80 MICRO**

•Amicrosolderingpencil, 80w/24V.Thissolderingpencilcanbeuniversallyusedinall situationsfromextremelydelicatesolderingtothosewherea greatertemperatureisrequired.w SP80set,consistsofw SP80 Microsolderingpencilwithw PH80Support.



•Thew ST20,50w/24V,copeswithallknownthermoelastic plastics. Adjustable for a stripping length up to 30mm. Additional blades available for stripping flat cables and shrinking.

# WST 20 THERMAL WIRE STRIPPER

# WMRT MICRO DESOLDERING

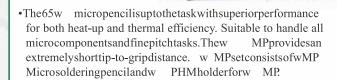
•Theneww MRT desoldering tweezerenables, with its twin paralleladjusted tiplets, precise de-soldering of very small SMD components. The high speed regulation of the stations w D1M, wD2M drives this tweezer.

# WMD3K MULTI DIGITAL

**TWEEZERS** 

•Thew MD3Kisa3channel, microprocessor controlled rework station, equipped with hot air pencil, soldering iron and desoldering iron, for use with surface mounted and conventional components. All tools can be operated simultaneously and independently. Additionally any othertoolfromthew ellerTemtronicrangecanbecontrolled fromthisstationuptoamaxloadingof150watts.

## **WMP**



# WTA 50 TWEEZER



•ThistweezerisusedtodesolderSMDcomponents.Thetweezer hastwomovableheatingelements.w TA50set,consistingof wTA50tweezer&AK51supportfortweezer.

## WSP80 MICRO



 withaheatingsurfaceof80x50mm,theypreheatpcboardsprior to micro rework.

# WMD1A MULTI DIGITAL SINGLE CHANNEL

•Thew MD1Aisasinglechannel micro-processor controlled hot air station equippedwithaHAP1hotairpencilforuseoncircuitsusing smaller surface mounted components. The station has a vacuum facility allowing it to be used as a conventional through hole soldering station by the addition of the desoldering iron, available as an accessory. The station can also drive all other Temtronic tools uptoamaximumratingof150watts.

FULL RANGE OF WELLER AND PLATO SOLDERING TIPS AVAILABLE



# **MAGNUM**

# SOLDERING & DESOLDERING

## **MAGNUM 2004**

# DIGITAL TEMPERATURE CONTROLLED SOLDER STATION



•The 2004 soldering station gives total temperature control with digital read-out. It comes standard with the 1002/50 w soldering iron. An 80 w version of the above station is also available.

## **MAGNUM 2002**

# TEMPERATURE CONTROLLED SOLDER STATION



•The 2002 soldering station with total temperature control comes standard with 1002/50w soldering iron. An 80w version of the above station is also available.

# **MAGNUM 2000**

# TEMPERATURE CONTROLLED SOLDER STATION



•Thisgeneralpurpose24VAC50w transformer station, like the 2002 and 2004, is supplied with a spring safety holder, sponge, spare tip storage and potential balance socket.

## **MAGNUM 3005 SMD**

## REWORK STATION



•The 3005 temperature-control station is precision engineered to perform on-demand for all your SMD work and repair. The hot air pencil is designed for effortless removal of components and the soldering iron is used for their replacement.

## **MAGNUM 3004**

## **HOT AIR STATION**



•The 3004 station is supplied with a 1004 hotair pencil, nozzles, SMD removal kit and spring holder.

# **MAGNUM 3000**

## **DESOLDERING STATION**



•Thismaintenance free compact portable and self contained work station is designed to provide total flexibility during use, allowing temperature of the desoldering iron to be controlled separately.

# **MAGNUM 1220**

## SOLDERING IRON



- •220V60w temperaturecontrolled soldering iron.
- •Rangeadjustablebetween200°Cand 420°C.
- •Accuracy of proportional controller +- 3%.
- •LEDHeating-pulse indicator.
- •Zeroleakagecurrentwhenearthed.
- •Plugsintoany220VACpowersource.

# **MAGNUM 1230**

# SOLDERING IRON



- •220V25w thermallybalanced soldering iron.
- •Temperatureatrest+-420°C.
- •Stainlesssteelelementandbarrel.
- •Longlifeiron-platedtips.
- •Plugsintoany220VACpowersource.

# **MAGNUM 1012**

# **SOLDERING IRON**



- •12V25w thermallybalanced soldering iron.
- •Operatingtemperature+-400°C.
- •Stainlesssteelheatingelementwith barrel
- •Longlifeiron-platedtips.
- •Batteryclipsconnecttocarbattery.





# **SOLDERING AIDS**

# **DESOLDER BRAID/WICK**



- •25L.
- •0,8mm.
- •Microcircuits.
- 1,5mLength.



- •55L.
- •1,3mm.
- Smallpads.
- •1,5mLength.



- •75L.
- •1,9mm.
- ·Mediumpads.
- 1,5mLength.



- •105L.
- •2,5mm.
- ·Largerpads.
- •1,5mLength.



# SOLDERING WIRE, BARS, PASTES & FLUXES







WIRES, BARS & PASTES AVAILABLE IN STANDARD METAL COMBINATIONS INCLUDING LEAD FREE

SOLDER **SUCKERS** 



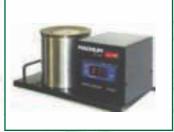
**FUME EXTRACTORS** 



**SOLDER DISPENSER** 



**SOLDER POTS** 



# Wellerportasol

# **GAS SOLDERING**

# **PORTASOL TECHNIC**



- Theoriginal
- •Continuoususeupto60min.
- Quickheatuptimes.
- •Tempadjustable.
- •Fittedignitor.

# **PORTASOL PROFESSIONAL**



- ${\bf \cdot} Continuous use up to 90 min.$
- •Quickheatuptime.
- •Tempadjustable.
- •Fittedignitor.

ALSOAVAILABLEINKIT



# **PORTASOL SUPERPRO II**



- •Continuoususeupto120min.
- •Tiptemp580°Cmax.
- •Tempadjustable(25-125watts equivalent.
- •Piezoignitor.

ALSOAVAILABLEINKIT



# WELLER **PYROPEN**



- •Piezoignitor.
- •Onefilllastsupto3hours.
- •350°C-500°C.
- **COMESINKIT**

SPARE TIPS AVAILABLE FOR ALL THE ABOVE GAS SOLDERING IRONS

# **GENERAL**

# MAGNIFICATION LAMPS AND HELPING HANDS



- •X5Magnification.
- •220Volt.
- •LED



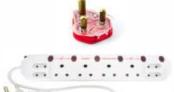
•Magnifier with 2LED lights

# PLUGS, EXTENSIONS, BATTERIES, NITTO TAPE AND CABLE TIES























# **AEROSOLS**

# THE NEW NAME IN AEROSOLS FOR THE ELECTRONICS INDUSTRY

# FR200 FLUX REMOVER





Removes flux residues, finger prints, watermarks, dirt and grease from PCB'S.

# **DB300 DUST BUSTER**





# **LR350 LABEL REMOVER**





Removes almost any label from any surface. Natural ingredient.

## CONCO PCB VARNISH



Clear self drying silicone resin.
Seals and protects.
Mil. spec.

# LUBRICATING/ PENETRATING OIL



Drys out wet electronics. Lubricates, loosens tight nuts and bolts. Prevents corrosion. Mil. spec.

## F40 FREEZER



Cooling agent for thermal fault locating. Cools components to -40°.

**ADHESIVE** 



# LOCTITE

# MAINTENANCE PRODUCTS





222 is for mild strength thread-locking allowing easy dismantling of parts. It is mainly recommended for brass and aluminum fasteners and small precision screws.



243

243 is for medium strength thread-locking of 'as received' parts. Effective on all industrial metals including stainless steel. It is recommended for nuts and bolts of all types.



270

270 is for high strength thread-locking of studs, nuts and bolts. It is recommended for use on threaded fastners not normally requiring dismantling.



277

277isahighviscosityproductthatprovidesmaximumlockingstrengthonlargediameterbolts. Itisrecommended where additional locking strength is required on fasteners subjected to high shear loads as well as high vibration shock levels.



480

480 is a tough, flexible instantadhes ive which has extremely good resistance to peel shock loads. Bonds rubber, metal and most plastics.



518

Forgasketingandsealingofsmalltolargegapsonvirtuallyanyshapeorsizecomponent. It is especially formulated to cure through large gaps.



572

Formediumstrengthsealingofpipefittingsandcoarsethreadedcomponents. It is more versatile than pipes dopes, tapes, etc.



638

For maximum strength retaining of cylindrical assemblies when used at elevated temperatures.



648

For high strength retaining of cylindrical assemblies when used at elevated temperatures.



FULL RANGE AVAILABLE ON REQUEST





# STATIC CONTROL MATERIALS & SYSTEMS

## ANTISTATIC



ANTISTATIC FOOTWEAR



ANTISTATIC WRIST STRAPS



- •Adjustable.
- •Elastic.
- •Silverimpregnated threads.
- Hypoallergenic.

**GROUNDING CORDS** 



# **ACCESSORIES**



- •Encapsulatedbananaplug.
- ·Adaptors.

CONTINUOUS WRIST STRAP MONITOR



PERSONAL GROUNDING TESTER FOR WRIST STRAPS & FOOTWEAR



EARTH CONNECTING BOX



CONDUCTING BRUSHES



ALUMINIUM SHIELDING BAGS



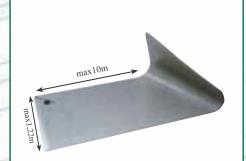
**ESD SERVICE KIT** 



ANTISTATIC GLOVES

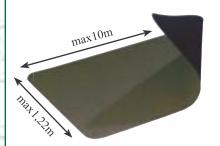


ANTISTATIC FLOOR MAT



- Static dissipative material.
- Ergonomic.
- Soft&elastic.
- Heat&soundabsorbent.
- •wecuttosize.

# ANTISTATIC TABLE MAT



- •Twolayermaterial.
- •Resistanttosolder&heat.
- Abrasionresistant.
- •Elastic.
- · Volumeconducting.
- •Includes2x10mmsnaps.
- Availableingrey & beige.
- •wecuttosize.

# **ANTISTATIC CHAIRS**



ANTISTATIC STAINLESS STEEL WRIST STRAPS











# TEST AND MEASUREMENT

# **DIGITAL MULTIMETERS**









# **INSULATION TESTERS**







# **CLAMP METERS**







YOU NAME IT WE DO IT!

Tektronix® KENWOOD

OSCILLOSCOPES,

**Agilent Technologies** 

**FUNCTION GENERATORS,** POWER SUPPLIES, PATTERN

**GENERATORS & TRACKERS** 

IR THERMOMETERS



THERMAL IMAGERS



SOUND LEVEL METERS



**VOLTAGE DETECTOR** 



DISTANCE METER



**OSCILLOSCOPES** 



**CABLE LOCTOR** 



**LUX METERS** 



**TONE & PROBE** 



**ACCESSORIES** 







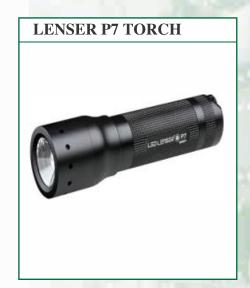


PURCHASE TEST EQUIPMENT FROM SAFTEC AND SEE HOW WE MEASURE UP!



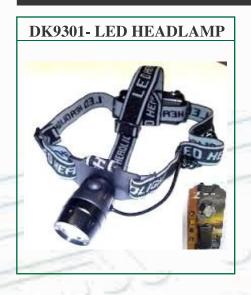


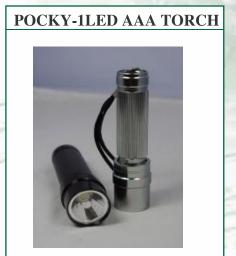






# TEC! MASTER







# **LEATHERMAN®**

# **MULTI FUNCTION PLIERS**



















# **INDUSTRIAL SUPPLIES** & EQUIPMENT

COUNTER SINKS DRILL BITS



**TAPS & DIES** 





- •Masonary. •Metric&ImperialSets.
- •SetsorLoose.



· Alltheshapesallthesizes.





**TOOL HOLDERS & INSERTS** 

**MILLING CUTTERS** 

DIY POWER TOOLS







**CUTTING AND GRINDING DISCS & WHEELS** 

**VARIOUS LADDERS** 

SOCKET SETS, IMPACT **SOCKETS & ACCESSORIES** 









**AIRLINE HOSE** 

**BLOW GUN** 

PNEUMATIC CONNECTORS

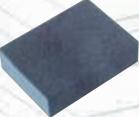






SAND PAPER, EMERY STRIPS, FLEXIBLE SANDING BLOCKS, SANDING DISCS, SANDING BELTS









FULL INDUSTRIAL SUPPLIES CATALOGUE AVAILABLE ON REQUEST



# **VICES**



# **TOGGLE CLAMPS**



**HAMMERS** 



**KNIVES** 



SPRING DIVIDERS HANDTOOLS



NON SPARKING TOOLS



WIRE BRUSHES & WHEELS







**MICROSCOPES** 

**VARIOUS TAPE MEASURES** 





**HACKSAWS** 



**CHISELS** 

SPIRIT LEVELS



STEEL RULERS









distribution (Constitution (Constitution)





**PISTON RING** 

**COMPRESSORS** 



WRECKING



**VERNIERS & MICROMETERS** 



**BOTTLE JACKS** 



**TROLLEY JACKS** 





# POWER TOOLS & ACCESSORIES

# STEINEL metabo







# HEAT GUNS & HEATSHRINKS





# GLUE GUNS & GLUESTICKS









# SAFETY EQUIPMENT

# FIRE EXTINGUISHERS AND SIGNS







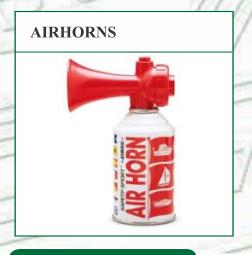
# FIRST AID KITS AND REFILLS





# **GENERAL**



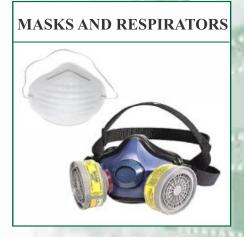


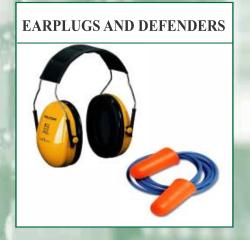




# PPE



























Instantly trend and monitor intermittent problems with TrendIt graphs.



Wirelessly save measurements directly from your test tools into work ordersonly available with Fluke Connect®

# **Fluke Connect**

An integrated system of wireless test tools and asset management software.

## Preventive maintenance simplified. Rework eliminated.

Save time and improve the reliability of your maintenance data by wirelessly syncing measurements using the Fluke Connect $^{\circledR}$  system .

- Eliminate data-entry errors by saving measurement data directly from the tool and associating it with the work order, report or asset record
- Maximize uptime and make confident maintenance decisions with data you can trust and trace
- Access baseline, historical and curent measurements by asset
- Move away from clipboards, notebooks and multiple spreadsheets with a wireless one-step measurement transfer
- Share your measurement data using ShareLive video calls and emails

# Fluke Connect enabled products include:

Current meters
Digital multimeters
Installation testers
Portable oscilloscopes
Temperature meters
Voltage meters
Vibration meters
Process tools
Infrared cameras







## Sign up for your free trial at: flukeconnect.com/freetrial

WiFi or cellular service is required to share data. Smart phone, wireless service and data plan not included with purchase. First 5 GB of storage is free. Phone support details can be viewed at fluke.com/phones.

Free Trial Terms: Open to those 18 years or older (or the age of majority under applicable law, whichever is older). Free trial is for a limited duration and is offered for a limited time. Void where prohibited by law. Terms and conditions are available upon registration.

Screens adjusted slightly to accommodate print. Smartphone is not included with purchase.

Within your providers wireless service area and subject to your plans pricing and other terms . Fluke Connect is not available in all countries. Some Fluke Connect features require a subscription subject to payment terms and may not be available in all countries .

# **DIGITAL MULTIMETERS**

# **Fluke 170 Series Digital Multimeters**

# Maintenance experts can find most electrical and HVAC problems

The Fluke 170 Series True-rms Multimeters is simple to use with significant improvements over the original Fluke 70 Series.

Wide 1000 V measurement range

True-rms for precise measurement of non-linear signals

Capacitance, resistance, continuity and frequency

Built-in thermometer (Fluke 179 only)

Backlight for work in dimly lit areas (Fluke 177 and 179 only)

Min/Max/Avg to record signal fluctuations

Display hold and auto hold

Manual and automatic ranging

Basic dc accuracy (179/0.09%, 177/0.09%, 175/0.15%)

Also available: 177 with true-rms and backlight and 175 with true-rms

## **Specifications**

DC voltage	600.0 mV, 6.000 V, 60.00 V, 600.0 V, 1000 V	± 0.09% (Models 177 and 179) ± 0.15% (Model 175)	
AC voltage1	600.0 mV, 6.000 V, 60.00 V, 600.0 V, 1000 V	± 1.0% of reading	
DC current	60.00 mA, 400.0 mA, 6.000 A, 10.00 A <sup>2</sup>	± 1.0% of reading	
AC current <sup>2</sup>	60.00 mA, 400.0 mA, 6.000 A, 10.00 A <sup>2</sup>	± 1.5% of reading	
Resistance	600.0 N, 6.000 kN, 60.00 kN, 600.0 kN, 6.000 MN, 50.00 MN	± 0.9% of reading	
Capacitance	1000 nF, 10.00 μF, 100.0 μF, 9999 μF	± 1.2 % of reading	
Frequency <sup>3</sup>	99.99 Hz, 999.9 Hz, 9.999 Hz, 99.99 kHz	± 0.1 % of reading	
Temperature (179 only)	-40 °C to +400 °C (-40 °F to +752 °F)	1.0% of reading	
Battery life	200 hours typical for alkaline		
Dimensions (HxWxL)	4.3 cm x 9.0 cm x 18.5 cm (1.7 in x 3.5 in x 7.3 in)		

 $<sup>^1</sup>$  All ac voltage and ac current ranges are specified from 5 % of range to 100 % of range.  $^2$  10 A continuous, 20 A for up to 30 seconds.

## **Ordering information**

Models	Included accessories
FLUKE-179 Digital Multimeter	Test leads, temperature probe, 9 V battery (installed), manual
FLUKE-177 Digital Multimeter	Test leads, 9 V battery (installed), manual
FLUKE-175 Digital Multimeter	Test leads, 9 V battery (installed), manual



















179/EDA2 Electronics Multimeter and Deluxe Accessory Combo Kit



TLK-225 SureGrip Master Accessory Set



C25 Meter Case



 $<sup>^3</sup>$ Voltage frequency is specified from 2 Hz to 100 kHz. Current frequency is specified from 2 Hz to 30 kHz .

# **DIGITAL MULTIMETERS**

























## Find little problems before they become big ones

The Fluke 289 and 287 are high performance industrial logging multimeters. The large 50,000 count, 1/4 VGA dot matrix display and multiple on screen displays give you sharp, clear readings. Use the logging function with expanded memory for unattended monitor ing of signals over time. With on-board TrendCapture, you can graphically review up 10,000 recorded events and logged readings. Then, zoom on trend provides an unprecedented ability to zoom in up to 14 times to view and analyze dataall without needing a PC

Two terminal 50 ohm range with 1 milliohm resolution, 10 mA source current. Useful for measuring and comparing differences in motor winding resistance or contact resistance (289)

Low-pass filter for accurate voltage and frequency measurements on adjustable speed motor drives and other electrically noisy equipment (289)

Add the wireless data logging capabilities of Fluke Connect® with Share-Live video call with the if3000 FC connector

True-rms ac bandwidth 100 kHz; dBV/dBm; dc mV resolution 1 µV; Megohm range up to  $500 M\Omega$ 

Conductance 50.00 nS

Min/Max/Avg/duty cycle/pulse width

Isolated optical DMM interface with USB PC connection

Over 200 hours logging capacity with new power saving function

Lo Ohm capability; Lo Z volts; Lo Pass Filter

## Specifications

Functions	Range and resolution	Basic accuracy
AC or dc voltage	50.000 mV, 500.00 mV, 5.0000 V, 50.000 V, 500.00 V, 1000.0 V	0.025 % 0.4 % (true-rms) (ac)
AC current dc current	500.00 µA, 5000.0 µA, 50.000 mA, 400.00 mA, 5.0000 A, 10.000 A	0.15 % 0.7 % (true-rms)
Temperature (excluding probe)	-200.0 °C to 1350.0 °C (-328.0 °F to 2462.0 °F)	1.0%
Resistance	$50.000~\Omega,~500.00~\Omega,~5.0000~k\Omega,~50.000~k\Omega,~500.00~k\Omega,~5.000~M\Omega,~50.00~M\Omega,~500.0~M\Omega$	0.05%
Capacitance	1.000 nF,10.00 nF, 100.0 nF, 1.000 μF, 10.00 μF, 100.0 μF, 100.0 μF, 1000 mF, 100 mF	1.0%
Frequency	99.999 Hz, 999.99 Hz, 9.9999 kHz, 99.999 kHz, 999.99 kHz	.005%

## **Ordering information**

Models	Included accessories
FLUKE-289 True-rms Industrial Logging Multimeter with TrendCapture	Test leads, alligator clips, holster, AA batteries installed, information packet
<b>FLUKE-287</b> True-rms Electronics Logging Multimeter with TrendCapture	Test leads, alligator clips, holster, AA batteries installed, information packet





# Kitsbuy more, save more





# **CLAMP METERS**





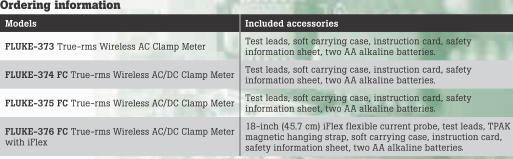
# **Unprecedented measurement flexibility**

The Fluke 370 FC Series clamp meters offer advanced troubleshooting performance plus Fluke Connect features to log and transmit data wirelessly.

Now you are able to log and trend measurements (the 376 FC and 375 FC have internal memory for up to 65,000 measurements), capture measurements outside the arcflash zone with Bluetooth® connectivity to your Apple® or Android® devices, transmit results wirelessly via the Fluke Connect Measurements app, and create and send reports right from the field.

The Fluke 370 FC Series Clamp Meters have a large backlit display, true-rms standard, CAT IV safety rating and a durably constructed body. Additionally, the 376 FC, 375 FC and 374 FC are compatible with the iFlex® Flexible Current Probe that measure up to 2500a ac .

# **Ordering information**



Find how-to videos, application notes, and other useful resources on the clamp meter product pages on www.fluke.com



# Fluke 320 Series True-rms Clamp Meters

# Go to work with the best

The small and rugged 320 Series True-rms Clamp Meters are the best general troubleshooting tools for commercial and residential electricians and are designed to verify the presence of load current, ac voltage and continuity of circuits, switches, fuses and contacts . The Fluke 325 also offers dc current and frequency measurements.

400 A ac current measurement (ac and dc current; 325 only) and 600 V ac and dc voltage measurement

Resistance measurement to up to 40 k $\Omega$  (325) and 4 k $\Omega$  (323 and 324) with continuity CAT IV 300 V/CAT III 600 V safety rating













Models	Included accessories	
FLUKE-325 True-rms Clamp Meter	Test leads, temperature probe, soft case and users manual	
FLUKE-324 True-rms Clamp Meter	Test leads, temperature probe, soft case and users manual	
FLUKE-323 True-rms Clamp Meter	Test leads, soft case and users manual	





Fluke 370 Series

iFlex® Flexible Current Probe C43 Small Soft Case



TL175 TwistGuard Test Leads



Fluke 320 Series

L210 Probe Light and Extender



# **DISTANCE METERS**

# Fluke 424D, 419D and 414D Laser Distance Meters

# Measure farther, with greater accuracy, in more situations

The Fluke family of laser distance meters are essential tools in the tool bag. They provide, instant and accurate measurements up to  $\pm$  1 mm with no scales to interpret or misread . Just point, click, done. The 424D has an inclination sensor that helps with leveling, height tracking and, measuring around obstacles. Find area and volume, easily add and subtract distances and calculate height. Easily measure hard-to-access areas without climbing a ladder and without the need for a helper.

# **Specifications**

specifications			
	Fluke 424D	Fluke 419D	Fluke 414D
Maximum measurement distance	100 m (330 ft)	80 m (260 ft)	50 m (165 ft)
Accuracy	± 1 mm (± 0.04 in)	± 1 mm (± 0.04 in)	± 2 mm (± 0.08 in)
Battery life (number of measurements)	5000	5000	3000
Area measurement			
Volume measurement			
Pythagoras calculations	Full	Full	1+2
Plus and minus calculations			
Measurement storage	20 complete displays	20 complete displays	5 results
Min/Max			Yes(Pyth)
Tripod mount			Towns Control of the
Corner angle measurement			
Stake out		1000	57,136ma05512
Inclination sensor			
Display	4 line	3 line	2 line
Automated end-piece correction			











Complies with EN 60825-1:2007 (Class II)

# Ordering information

Models	Included accessories	
Fluke 424D Laser Distance Meter	Two AAA batteries, users manual on CD, quick reference guide, vinyl carrying pouch, and three-year warranty	
Fluke 419D Laser Distance Meter	Two AAA batteries, users manual on CD, quick reference guide, vinyl carrying pouch, and three-year warranty	
Fluke 414D Laser Distance Meter	Two AAA batteries, users manual on CD, quick reference guide, vinyl carrying pouch, and three-year warranty	



# Kitsbuy more, save more



# **EARTH GROUND TESTERS**





# Selection guide

	1630	1621	1623-2	1625-2
2-Pole (ac) resistance measurement				
3-Pole earth measurement		-		
Measurement frequency128 Hz				
4-Pole earth ground and soil resistivity measurement	WCO.			
Selective testing				
Stakeless testing (ground loop resistance)	WAY CAN	la constitution of		
Memory				
USB port	- 0			
Automatic Frequency Control (AFC) 94 Hz to 128 Hz				
R* measurement	LANGE OF STREET	1000		
Adjustable limits				

# Fluke 1625-2 and 1623-2 Geo Earth **Ground Testers**

# Simpler, faster testing

Grounding testers, like the Fluke 1623-2 and 1625-2, help maintain uptime and lower the risk of electric shock to users while helping solve intermittent power quality problems . The Fluke earth ground testers perform all four essential earth ground test methods that users demand:

3- and 4-pole Fall of Potential, earth resistance loop testing

4-pole soil resistivity testing

Selective earth ground testing using one clamp

Stakeless earth ground testing using two clamps

The 1623-2 and 1625-2 also make earth grounding tests faster and easier than previous methods because of automatic data collection and storage and faster setup. Color coded wires for easier identification and deploying of wire reels and stakes.

IP56 rated for outdoor use

USB data storage and transfer

Automatic Frequency Control (AFC)identifies existing interference and chooses a measurement frequency to minimize its effect, providing more accurate earth ground value R\* measurement calculates earth ground impedance at 55 Hz to more accurately reflect the earth ground resistance that a fault-to-earth ground would see

Adjustable limits for quicker testing



and deployment of wire reels and stakes.

# Ordering information Models

Faster setup, easier testing FLUKE-1625-2 Advanced GEO Earth Ground Tester

FLUKE-1623-2 Basic GEO Earth Ground Tester

FLUKE-1625-2 KIT Advanced GEO Earth Ground Tester Kit

FLUKE-1623-2 KIT Basic GEO Earth Ground Tester Kit

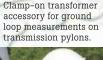
## Included accessories

Two test leads, USB cable, batteries, quick reference guide, users manual

Two test leads, USB cable, batteries, quick reference guide,

Two test leads, USB cable, 2 clamps (1 source, 1 sensing), carrying case, 4 earth ground stakes, 3 color coded cable reels, batteries, quick reference guide, users manual

These products are for unpowered installations measuring grounding connections .





# Kitsbuy more, save more



Fluke 1625-2 Kit



ES-162P4-2 Stake/reel set for 4-pole measurement



EI-1625 Selective/ stakeless clamp set for 1625-2



EI-162BN 320 mm (12.6 in) Split Core Transformer for use with Fluke 1625-2

# **INSULATION TESTERS**



# Fluke 1587 FC/1577 Insulation Multimeters

# The High-Performance 2-in-1 Insulation DMM

The Fluke 1587 FC and 1577 Insulation Multimeters combine a digital insulation tester with a full-featured, true-rms digital multimeter in a single compact, handheld unit, which provides maximum versatility for both troubleshooting and preventive maintenance.

The Fluke 1587 FC Insulation Multimeter adds four powerful new diagnostic functions through the Fluke Connect® Measurements app:

PI/DAR timed ratio tests with TrendIt graphs identifies moisture and contaminated insulation problems faster

Memory storage through Fluke Connect eliminates writing down results, reduces errors and saves data for historical tracking over time

Temperature Compensation through app for establishing accurate baselines and relevant historical comparisons

Historical tracking and trending of assets identifies degradation over time, allows real-time decisions to be made in the field with Fluke Connect® Assets (sold separately)











## **Specifications**

	1587 FC	1577
PI/DAR timed ratio measurements with TrendIt graphs through Fluke Connect Measurements app		
Memory storage through Fluke Connect Measurements app	150 A.A.A.E.E.	
Temperature Compensation through Fluke Connect Measurements app		
Insulation test voltages 50 V, 100 V, 250 V, 500 V, 1000 V		
Insulation test voltages 500 V, 1000 V		
Insulation resistance	0.01 MΩ to 2.0 GΩ	0.1 MΩ to 600 MΩ
Auto-discharge of capacitive voltage		
Insulation test smoothing reading		
Frequency		
Capacitance	A COLUMN TO SELECT	
Diode test		
Temperature	The second	
Min/Max		
VFD low-pass filter for accurate motor drive measurements		
AC/DC voltage		
DC millivolts		
AC/DC milliamps		
Resistance	0.1 Ω to 50 MΩ	0.1 Ω to 50 MΩ
Continuity		
Auto power off		
Warranty (years)	3	3

# **Ordering information**

Models	Included accessories
FLUKE-1587 FC Insulation Multimeter	Remote probe, test leads, alligator clips, K-type thermocouple, hard case, users documentation
FLUKE-1577 Insulation Multimeter	Remote probe, test leads, alligator clips, hard case, users documentation

Troubleshooting efficiency and maximum versatility while testing motors and VSDs accurately with Low-Pass filter.



# Kitsbuy more, save more



Fluke 1587 KIT/62MAX+ FC Advanced Electrical Troubleshooting Kit



Fluke 1587/MDT FC Advanced Motor and Drive Troubleshooting Kit



**TLK289** Industrial Master Test Lead Set



i400 AC Current Clamp



# **INSULATION TESTERS**

# Fluke 1507 and 1503 Insulation Resistance Testers

# The quality, durability, and convenience you need

These lightweight, affordable insulation testers are perfect for troubleshooting, commissioning and preventive maintenance applications.

Automatic calculation of polarization index and dialectric absorption ratio (1507 only)

Multiple test voltages: 50 V, 100 V, 250 V, 500 V, 1000 V (1507 only)

Remote test probe for rapid testing

Insulation test range 0.01 M $\Omega$  to 10 G $\Omega$  (1507), 0.1 M $\Omega$  to 2 G $\Omega$  (1503)

Compare (Pass/Fail) function for repetitive tests (1507 only)

Live circuit detection prevents insulation test if voltage > 30 V is detected

Auto-discharge of capacitive voltage

AC/DC voltage: 0.1 V to 600 V

Lo ohms/Earth-bond continuity (200 mA) for checking connections and motor windings

Resistance: 0.01  $\Omega$  to 20.00 k $\Omega$ 

# **Specifications**

7   1503
0.1 MΩ to 2 GΩ
00 mA acc. EN 61557-4
0.00 kΩ 0.1 Ω to 20.00 kΩ
1

## **Ordering information**

Models	Included accessories	
FLUKE-1507 Insulation Tester	Remote probe, silicone test leads, test probes, large alligator clips, holster, users manual	
FLUKE-1503 Insulation Tester	Remote probe, silicone test leads, test probes, large alligator clips, holster, users manual	















Magnetic Meter Hanger frees up both hands to focus on making measurements safely.

Check connections and motor windings with Lo ohms/earth-bond continuity test.





TLK289 Industrial Master Test Lead Set



TL27 Heavy Duty Test Lead Set



C116 Soft Carrying Case



C101 Hard Case



# POWER QUALITY AND ENERGY TOOLS



# Fluke 430-II Series Three-Phase **Power Quality and Motor Analyzers**







-	1 1	0151	
wetoles		Loss C	051/RG
Frective	323 MI	748 U	966
leactive	164 kvar	193 U	100
inbelance	170 kUR	190 U	100
listortion	558 M/A	2.52 W	1888
leutral	51.7 kB	3.08 U	6.225
ine loss		3.66 kU	2708



# Locate, predict, prevent power quality problems

The Fluke 434-II, 435-II, 437-II and 438-II help troubleshoot power quality problems in threeand single-phase power distribution systems The Fluke patented energy loss algorithm, Unified Power Measurement, measures, quantifies and monetizes energy losses due to harmonics and unbalance issues, allowing the user to pinpoint the origin of energy waste within a system

Capture fast rms data in real time with PowerWave data capture; show single cycle rms value to characterize electrical system dynamics (generator start-ups, UPS switching etc.)

Measure key parameters on direct-on-line motors including torque, RPM, mechanical power and motor efficiency (438-II, or with 430-II/MA upgrade option)

CAT IV 600 V/CAT III 1000 V rated for use at the service entrance

Automatic transient mode; capture 200 kHz waveform data on all phases simultaneously up to 6 kV for 435-II and 437-II

Conduct tests according to the stringent international IEC 61000-4-30 Class-A standard intervals for 435-II and 437-II

With included four iFlex flexible current probes, measure all three phases and neutral Download data wirelessly with the Fluke Connect® SD Card (not included with the INTL) Three-vear warranty

Included accessories

GuetoloedCurrent Loss Cost/no Cost Effective 323 MU 748 U sec	Ordering information
Reactive 164 kvar 193 U ste Urbelance 170 kUR 190 U ste	Models
Natortian 598 M/A 2.52 MV see Natural 51.7 kA 3.08 V 6225	FLUKE-434-II Three-Phase Energy Analyzer
THE STATE STATE STATE STATE STATES	<b>FLUKE-435-II</b> Three-Phase Power Quality and Energy Analyzer
	Fluke-438-II Three-Phase Power Quality and Motor Analyzer

Four thin flexible current probes, five test leads and clips, battery charger, Power Log software, USB cable, color localization set, soft carrying case, 8GB WiFi SD memory card, users manual on CD

Four thin flexible current probes, five test leads and clips, battery charger, Power Log software, USB cable, color localization set, hard carrying case with wheels, 8GB WiFi SD memory card, users manual

Fluke-430-II/MA 430-II Motor Analyzer Firmware license code Upgrade Kit



# Fluke 1730 Three-Phase Electrical Energy Logger

## **Find sources of energy waste**

FLUKE-437-II 400 Hz Three-Phase Power

Quality and Energy Analyzer

The Fluke 1730 Three-Phase Electrical Energy Logger introduces a new simplicity to discovering sources of electrical energy waste. Profiling energy usage across your facility helps you identify opportunities for energy savings and provides you with the easy-tounderstand data. The Fluke 1730 Energy Logger can be used for conducting energy surveys that require both a voltage and current connection. Load studies that require a current connection only for evaluating electrical demand capacity can also be performed.

Quickly understand specific points of energy loss, reduce energy bills more easily than ever Optimized layout with specialized touch screen makes navigation easyeven with gloves on Advanced auto-correct feature eliminates costly errors due to improper connections Power directly from the measured voltage line (up to 500 V) or with conventional ac power cord

# **Ordering information**



# 1730/BASIC Three-Phase Electrical Energy Logger (excludes current probes)

1730/US Portable Energy Logger US version

1730/EU Portable Energy Logger EU version

1730/INTL Portable Energy Logger ITNL version

FLUKE-1735 Three-Phase Power Logger

# Included accessories

Power supply, voltage test lead, dolphin clip, i1730-flex 1500 iFlex Flexible Current Probes color-coded wire clips, power cord, test lead set with stackable plugs, dc power cable(s), USB cable A, mini USB, soft storage bag, input connector decal, information packet. Software included Software included (FEA, Fluke Energy Analyze)

Four flexible current probes (15 A/150 A/3000 A), Power Log software, voltage leads and clips, color localization set, PC interface cable, international ac adapter (115 V/230 V, 50 Hz/60 Hz), soft carrying case, users manual, multi-language manual on CD

# **PROCESS CALIBRATION TOOLS**



(789 only)



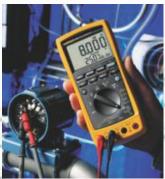












Fluke 789 ProcessMeter is two tools in one, a CAT IV 600V safety rated DMM and a full functioning mA loop calibrator. Perfect for instrumentation and I and E technicians.



# Fluke 789 and 787 ProcessMeter Test Tools

Combine the functionality of a loop calibrator with the power of a digital multimeter

## Fluke 789 ProcessMeter

The Fluke 789 ProcessMeter is the ultimate troubleshooting tool for process technicians. Add the wireless data logging capabilities of Fluke Connect® with ShareLive video call, and process technicians can do a lot more while carrying a lot less.

Unique new wireless measurement logging capability

24 V loop power supply

HART mode setting with loop power (adds 250 ohm resistor)

20 mA drive into 1200 ohms

 $0\,\%$  to  $100\,\%$  mA Span Check buttons to toggle between 4-20 mA

Infrared I/O serial port compatible with FlukeView® Forms Software

## Fluke 787 ProcessMeter

Simultaneous mA and % of scale readout on mA output 25 % Manual Step plus Auto Step and Auto Ramp on mA output Min/Max/Avg/Hold/Relative modes

## **Specifications**

becomparison.			
Measurement function	Best accuracy range and resolution	(% of reading + LSD)	
V dc	400.0 mV, 4.000 V, 40.00 V, 400.0 V, 1000 V	0.1 % + 1	
V ac (true-rms)	400.0 mV, 4.000 V, 40.00 V, 400.0 V, 1000 V	0.7 % + 2	
mA dc	30.000 mA	.05 % + 2	
A dc	1.000 A (0.440 A continuous)	0.2 % + 2	
A ac	1.000 A (0.440 A continuous)	1 % + 2	
Resistance	$400.0~\Omega,~4.000~k\Omega,~40.00~k\Omega,$ $400.0~k\Omega,~4.000~M\Omega,~40.00~M\Omega$	0.2% + 1	
Frequency (0.5 Hz to 20 kHz)	199.99 Hz, 1999.9 Hz, 19.999 kHz	0.005% + 1	
Diode test	789: 2.000 V (shows diode voltage drop) 787: 2.400 V (shows diode voltage drop)	2% + 1	
Continuity	Beeps for resistance < approx. 100 ohms		

Oditinaity	beeps for resistance \ approx. 100 onms		
Output function	Range and resolution	Drive capability	Accuracy (% of span)
DC current output-source mode (internal battery operation)	0.000 mA to 20.000 mA or 4.000 mA to 20.000 mA (selectable at power-up)  Over-range to 24.000 mA	789: 24 V compliance or, 1,200 ohms, @ 20 mA 787: 12 V compliance or, 500 ohms, @ 20 mA	0.05%
DC current output-simulate mode (external 24 V loop supply, up to 48 V on 789 only)	0.000 mA to 20.000 mA or 4.000 mA to 20.000 mA, (selectable at power-up) Over-range to 24.000 mA	1000 ohms, @ 20 mA	0.05%
24 V loop supply	789: Minimum 24 V, 787: Not available	250 ohms @ 20 mA	> 24 V
Current adjustment modes	Manual: coarse, fine, 25% and 100%	* '	nly)

Automatic: slow ramp, fast ramp, 25% step

General specifications Temperature range 18 °C to 28 °C for one year after calibration Maximum voltage 1000 V rms (applied between any jack and earth ground) Temperature -40 °C to 60 °C (storage); -20 °C to 55 °C (operating) Relative humidity 95% up to 30°C; 75% up to 40°C; 45% up to 50°C; 35% up to 55°C Safety IEC 61010-1: 600 V CAT IV / 1000 V CAT III Size (HxWxL)/weight (787 w/ holster) 52 mm x 98 mm x 201 mm (2.06 in x 3.86 in x 7.93 in)/638 g (1.4 lb) Size (HxWxL)/weight (789) 50 mm x 100 mm x 203 mm (1.97 in x 3.94 in x 8.00 in)/600 g (1.3 lb) Warranty Three-year

## **Ordering information**

Models	Included accessories
FLUKE-789 ProcessMeter	Test leads, alligator clips, 4 AA alkaline batteries (installed), quick reference guide, users manual, multi-language manual CD
FLUKE-787 ProcessMeter	Test leads, alligator clips, holster with test lead storage, one 9 V alkaline battery (installed), quick reference guide, users manual, multi-language manual CD

# INFRARED TOOLS



# Fluke Performance Series: TiS75/65/60/55/50/45/40/20/10



# Easy-to-use frontline troubleshooting

Easily see potential problems with precisely blended IR and visual images with a 5MP visual camera, up to  $320 \times 240$  resolution, and a large 3.5 inch LCD. Get precise focus as close as 15 cm (6 in) with manual focus.

With up to  $320 \times 240$  resolution, you can see more detail in every image, even from a distance detail that could indicate a potential issue

Get the context of the visual and infrared details all in one precisely blended or picture-in-picture image with IR-Fusion® technology¹

Reduce the amount of time it takes to get an in focus image with manual or fixed focus options

Make decisions in real timewirelessly sync images from your camera, create and email reports all with your smart phone and the Fluke Connect® App.

Wirelessly connect to other Fluke Connect tools and pull in other measurements types like electrical and vibration into your thermal image .

Removable 4GB micro SD card

Digitally document critical information with your infrared image using IR-PhotoNotes  $\,$  or voice annotation  $^{\!3}$ 

Monitor battery charge and avoid unexpected loss of power with the smart battery with LED charge indicator

IR-Pusion" and picture-in-picture mode execution varies by model \*Within your providers wireless service area: Fluke Connect\* is not available in all countries. Subscription to Fluke Connects Assets is reduried arrived



Inspect industrial components.

Designed for your environment.



## **Ordering information**

Models	Included accessories

FLK-TiS75 30HZ Industrial Commercial Infrared Camera
FLK-TiS75 9HZ Industrial Commercial Infrared Camera

FLK-TiS65 30HZ Industrial Commercial Infrared Camera

FLK-TiS65 9HZ Industrial Commercial Infrared Camera

FLK-TiS60 9HZ Industrial Commercial Infrared Camera

FLK-TiS55 30HZ Industrial Commercial Infrared Camera
FLK-TiS55 9HZ Industrial Commercial Infrared Camera

FLK-TiS50 9HZ Industrial Commercial Infrared Camera

FLK-TiS45 3HZ Industrial Commercial Infrared Camera

FLK-TiS45 9HZ Industrial Commercial Infrared Camera

FLK-TiS40 9HZ Industrial Commercial Infrared Camera

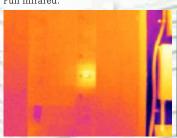
FLK-TiS20 9HZ Industrial Commercial Infrared Camera

FLK-TiS10 9HZ Industrial Commercial Infrared Camera

Universal AC power adapter, lithium ion smart battery (TiS75, TiS65/60 includes 2 eachother models 1 each), USB cable, Micro SD card (TiS75, TiS65/60, TiS55/TiS50, TiS45), hard carrying case (TiS75, TiS65/60, TiS55/50, TiS45/40), soft transport bag, adjustable hand strap (TiS75, TiS65/60, TiS55/50, TiS45/40) and quick start guide. TiS75, TiS65/60 models include a two-bay battery charger.

Full infrared.

50 % blending, picture-in-picture mode Picture-in-Picture.







# **VISUAL IR THERMOMETERS**

# Fluke VT04/VT04A Visual IR Thermometer

# Designed to see it all

See issues in context by blending the infrared heat map with a visual image, and get the detail you need by choosing one of five on-screen blending modes . See aligned images from as close as 15 cm (6 in) in near mode or from a distance in far mode . Plus, obtain accurate temperature readings without taking your eyes off the screen . The center measurement box shows the exact area of temperature measurement . Fill that center box with your target and rest assured you're not measuring the background.

Identify intermittent problems by monitoring equipment over time or get alerts when a temperature is outside the expected range with temperature alarms and automated monitoring features

Instantly identify the hottest and coldest spots within the field of view with hot and cold markers

Handy when you need it; easily fits in your tool bag or pocket

Intuitive enough to use right out of the box

Easily access saved images with the removable SD card

Save in .bmp format when you only want the image, or choose .is2 format so you can optimize images and create reports with Fluke SmartView ® software, available by free download from Fluke.com

# Fluke IR Windows CV400/401/300/301/200 CLKT100/75/50

# Increase the safety and speed of your electrical infrared inspections

A companys greatest investment is not the equipment that Js behind the panel door . It Js the electricians, engineers and inspectors who risk their lives every day doing their jobs .

Highest arc blast safety rating available 63 kA\*

Under 5 minute installation with 1 person; no need to remove panel door

Clearly view equipment both visually and thermally with ClirVu $^{\circledR}$  coating that protects the optic from the elements

Corrosion and UV resistant for challenging outdoor environmentsIP67 rugged\*

\* CV Series only



50% blended heat map.



# **Ordering information**

	Models	Included accessories		
	FLK-VT04A Visual IR Thermometer	Soft case, micro-SD card, micro-SD conversion adapter to standard, AA batteries (4), quick reference guide		
	FLK-VT04 Visual IR Thermometer	Hard case, micro-SD card, micro-SD conversion adapter to standard, lithium-ion rechargeable battery, micro USB charger/power supply (including worldwide adapters), quick reference guide		

## **Ordering information**

-	Models
	CV400 4 in (95 mm) IR Window, Hand Turn Door Latch
	CV401 4 in (95 mm) IR Window, Security Key Door Latch
	CV300 3 in (75 mm) IR Window, Hand Turn Door Latch
	CV301 3 in (75 mm) IR Window, Security Key Door Latch
	CV200 2 in (50 mm) IR Window, Hand Turn Door Latch
	$\mbox{\bf FLK-100-CLKT}$ 4 in (100mm) C-Range IR Window, Kwik Twist
	FLK-075-CLKT 3 in (75mm) C-Range IR Window, Kwik Twist

FLK-050-CLKT 2 in (50mm) C-Range IR Window, Kwik

Included accessories

Fluke IR Windows are supplied complete, assembled and ready for installation. In addition to the IR Window, each carton contains warranty statement and security key if that option is ordered.

Fluke IR Windows are supplied complete, assembled and ready for installation. In addition to the IR Window, each carton contains warranty statement

Fluke IR Windows enable you to inspect electrical equipment without opening panel doors.





Twist

# VISUAL IR THERMOMETERS



# Fluke infrared thermometers: 62 MAX+, 62 MAX, 59 MAX and 572-2

## Take measurements from a safe distance

Fluke has built infrared thermometers with the durability and accuracy you need to do your job, and all within your budget. These IR Thermometers offer precise laser technology for accurate and repeatable measurements.

## Fluke 62 MAX+ highlights:

Three-meter drop tested 12:1 distance to spot ratio Min/Max/Avg/Dif, Hi and Lo alarms Dual lasers for superior targeting

# Fluke 62 MAX highlights:

Single laser targeting 10:1 distance to spot ratio

## Fluke 59 MAX highlights:

8:1 distance to spot ratio Min/Max/Avg/Dif, Hi and Lo alarms

## Fluke 59 Max+ highlights:

10:1 distance to spot ratio Min/Max/Avg/Dif, Hi/Lo alarms

# **Specifications**



	62 MAX+	62 MAX	59 MAX+	59 MAX		
Temperature range	-30 °C to 650 °C (-22 °F to 1202 °F)	-30 °C to 500 °C (-22 °F to 932 °F)	-30 °C to 500 °C (-22 °F to 932 °F)	-30 °C to 350 °C (-22 °F to 662 °F)		
Accuracy	± 1.0 °C or ± 1.0 % of reading, whichever is greater -10 °C to 0 °C: ± 2.0 -30 °C to -10 °C: ± 3.0	± 1.5 °C or ± 1.5 % of reading, whichever is greater -10 °C to 0 °C: ± 2.0 -30 °C to -10 °C: ± 3.0	0° C: ± 1.5 °C or ± 1.5 % of reading, whichever is greater	≥ 0 °C: ± 2.0 °C or ± 2.0 % of reading, whichever is greater		
Emissivity			0.10 to 1.00	0.10 to 1.00		
Power	AA battery					
Compliance	EN/IEC 61010-1: 2001					
Laser safety	FDA and EN 60825-1 Class II					

# Fluke 572-2 Thermometer

Extremely wide measurement range from -30 °C to 900 °C (-22 °F to 1652 °F) 60:1 distance to spot ratio with dual laser sighting



# Fluke 50 Series II Thermometers

# Lab accuracy in a field thermometer

Laboratory accuracy: ± (0.05 % + 0.3 °C) Large backlit dual display, in °C, °F, or Kelvin (K)

Min/Max/Avg

Supports a wide range of thermocouple types

**Powerful data logging capabilities** The Fluke 53 II B and 54 II B can log up to 500 points of data to internal memory.

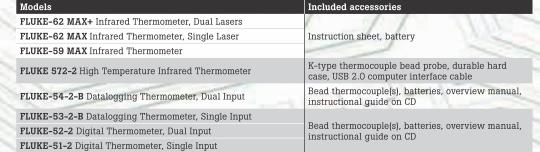
User-adjustable recording intervals

Real-time clock captures the exact event

Download data to optional FlukeView® PC software



# **Ordering information**





# **VISUAL IR THERMOMETERS**

# Fluke 560 Series Infrared Thermometers

# Stand up to tough industrial, electrical, HVAC, and mechanical environments

With a straight-forward user interface and soft-key menus, the Fluke 560 Series IR Thermometers make even complex measurements easy. With just a few pushes of a button you can easily adjust emissivity, record data, or turn on and off alarms .

Measure up to 800 °C (1470 °F)

Easily access advanced features with the soft-key buttons and graphical display

Scan large areas or small objects; measure smaller objects from further away

Compatibility with most type K thermocouples

Confidently measure more surfaces, with adjustable emissivity and built-in materials table Log and download measurements for reporting (568)

Audible and visual alarms alert you to measurements outside of set limits

Pipe probe for superheat and sub-cooling; other contact and ambient measurements (561)

Min/Max/Avg/Dif functions

Includes KTC bead probe

1 % measurement accuracy

## **Specifications**

Specifications					
Fluke 561	Fluke 566	Fluke 568			
-40 °C to 535 °C (-40 °F to 995 °F)	-40 °C to 650 °C (-40 °F to 1202 °F)	-40 °C to 800 °C (-40 °F to 1472 °F)			
Greater of ± 1 % or ± 1 °C (2 °F)					
12:1	30:1	50:1			
Laser point					
Up to 2.5 m (7 ft)	Up to 4.5 m (15 ft)	Up to 7.5 m (25 ft)			
Thermocouple K					
-40 °C to 550 °C (-40 °F to 1022 °F)		-270 °C to 1372 °C (-454 °F to 2501 °F)			
	20	99			
		Yes, with FlukeView® Forms			
Min/Max/Dif		Min/Max/Avg/Dif			
Hi/Med/Lo Material table or 0.1 to 1.00 by 0.01					
-		High and low alarms			
	2 A.	A			
rranty Two-year					
	-40 °C to 535 °C (-40 °F to 995 °F)  12:1  Up to 2.5 m (7 ft)  -40 °C to 550 °C (-40 °F to 1022 °F)	-40 °C to 535 °C (-40 °F to 1202 °F)  Greater of ± 1 % of 12:1  12:1  30:1  Laser p  Up to 2.5 m (7 ft)  Up to 4.5 m (15 ft)  Thermoco  (-40 °F to 1022 °F)  20  Min/Max/Dif  Hi/Med/Lo  Material			



## **Ordering information**

ordering information			
	Models	Included accessories	
	FLUKE-568 Infrared Thermometer	USB cable, FlukeView® Forms software, thermocouple type K bead probe, carrying case, two AA batteries, users manual, quickstart guide	
	FLUKE-566 Infrared Thermometer	Thermocouple type K bead probe, carrying case, two AA batteries, users manual and quickstart guide	
	FLUKE-561 Infrared Thermometer	Thermocouple type K pipe probe, carrying case, two AA batteries, users manual	
	FLUKE-61 Infrared Thermometer	9 V battery, instruction sheet	
	FLUKE-63 Infrared Thermometer	Wrist strap, carrying case, 9 V battery, users manual	





The 568 allows for temperature measurement of small components.





# LED LENSER® Creating New Worlds of Light™

















An Arc Flash suit consists of the following products

- \*ARC Flash Hood
- \*ARC Flash Jacket
- \*ARC Trousers
- \*ARC Flash gloves
- \*Protective boots

The ARC Flash categories range from

\*8 CAL to 100 CAL

Safety is always a first priority in electrical engineering. The preservation of life is imperative. Arc Flash suits are a small cost in comparison to the loss in quality of life if a worker is exposed to an electric arc event. Electrical technicians, by law should always wear and be properly trained in the safe use and application of Arc Flash suits and appropriate personal protective equipment such as insulated rescue sticks for the possible electrical hazard with which they may face.

























We source only the best & most technologically advanced products world wide to help you work, professionally.

