### **General Accessories**

The best test tools deserve accessories designed and manufactured to the same high quality and safety standards. So we also provide a comprehensive range of test leads, probes and clips, current clamps, temperature accessories and dedicated electronic and automotive accessories. And to protect your valuable instrument, choose a rugged Fluke tailor-made holster or case.





Watch our latest videos on our own YouTube Channel www.youtube.com/user/FlukeEurope

### FLUKE®

# Electronic Test Leads, Probes & Clips

#### **Test Leads**

#### **TL910 Electronic Test Lead Set**

- Very small 1 mm tips to access hard to reach test points
- Probe tip length up to 100 mm, test lead length: 1 m
- Included: 3 sets of spring loaded gold tips and 2 sets of stainless steel tips
- CAT II 1000 V, 3 A rating



- **TP912 Replacement Tips for TL910**
- Replacement tips for TL910
- Five sets of gold plated and stainless steel tips

#### **TL40** Retractable Tip Test Lead Set

- One pair (red, black) of test leads with sharp needle point tips adjustable to desired length from 0 to 76 mm
- Extra hard probe tips to provide long service life
- Flexible silicone insulated test leads
- CAT III 300 V, 3 A rating

#### TL940 Mini-Hook Test Lead Set

- 1 pair (red, black) of test leads with multistacking 4 mm banana plugs and mini-hooks
- Mini-hooks attach to component leads up to 1.5 mm diameter
- 90 cm long PVC insulated leads
- 30 V rms or 60 V DC, 5 A



#### Test Leads / Patch Cords

#### TL960 Micro-Hook Test Lead Set

- 1 pair (red, black) of test leads with multi-stacking 4 mm banana plugs and micro-hooks
- Micro-hooks attach to component leads up to 1 mm diameter
- 90 cm long PVC insulated leads
- 30 V rms or 60 V DC, 15 A

#### TL930 Patch Cord Set (60 cm)

- 1 pair (red, black) multi-stacking 4 mm banana plug patch cords
- Nickel-plated banana plugs
- 60 cm long PVC insulated leads
- 30 V rms or 60 V DC, 15 A

#### TL932 Patch Cord Set (90 cm)

- 1 pair (red, black) multi-stacking 4 mm banana plug patch cords
- Nickel-plated banana plugs
- 90 cm long PVC insulated leads
- 30 V rms or 60 V DC, 15 A

#### TL935 Patch Cord Kit (60, 90, 120 cm)

- 3 sets (red and black pairs) of multi-stacking 4 mm banana plug patch cords
- Nickel-plated banana plugs
- 60 cm, 90 cm, 120 cm long PVC insulated leads
- 30 V rms or 60 V DC, 15 A

#### TP920 Test Probe Adapter Kit

- Set of push-on adapters for TL71 and TL75 test probes
- IC test adapters, extended probe tips, medium alligator clips (max.opening 7.6 mm)
- CAT I 300 V, 5 A rating

#### TL970 Hook and Pincer Kit

- TL940 Mini-Hook Test Lead Set
- TL950 Mini-Pincer Test Lead
- TL960 Micro-Hook Test Lead Set

#### TL81A Deluxe Electronic Test Lead Kit

- Includes components of TL80, plus one pair (red, black) each modular 1 meter long silicone test lead, test probe, hook-style
  - and pinch style clip, alligator clip, IC probe tip adapter and spade lugs
- Quadfold soft carrying case



#### TLK287 Electronic Master Test Lead Kit

- Includes modular leads, probes (black and red), minigrabber/jack set, medium alligator clips (black and red), spade lug/
- banana jack plated (set), couplers IEC1010 (black and red), micrograbbers and -leads (black and red)
- TL910 Electronic Test Lead Set
- Quadfold Pouch
- CAT III 1000 V (probes only)

#### **TL950 Mini-Pincer Test Lead Set**

- 1 pair (red, black) of test leads with multi-stacking 4 mm banana plugs and mini-pincers
- Mini-pincers open to 2.3 mm
- 90 cm long PVC insulated leads
- 30 V rms or 60 V DC, 5 A

## **Kits**

#### TL80A-1 Basic Electronic Test Lead Kit

- One pair (red, black) each 1 meter long silicone test lead set. alligator clip and probe tip extender.
- C75 soft carrying case



#### **BP980 Double Banana** Plug Kit

- 5 pair (red, black) of double
- 4 mm banana plugs
- Each plug has 3.1 mm holes for mounting wires and components
- Brass plugs/jack, beryllium copper springs
- 30 V rms or 60 V DC, 15 A

### FLUKE ®

### Industrial Test Leads, Probes & Clips

#### **Test Leads**

#### **TL71-1 Premium Test Lead Set**

- One pair (red, black) comfort grip probes with silicone insulated, right-angle test leads
- Recommended for μV measurements
- CAT II 1000 V, 10 A rating
- CAT III 1000 V, CAT IV 600 V with protective cap

#### TL75-1 Hard Point™ Test Lead Set

- One pair (red, black) comfort grip probes with PVC insulated, test leads with right-angle shrouded banana plugs
- Recommended for general purpose measurements
- CAT II 1000 V, 10 A rating.
- CAT III 1000 V, CAT IV 600 V with protective cap

#### TL76 All-in-one Test Lead Set

- One pair (red, black) 1.5 meter long silicone test leads with right angle shrouded banana plug
- Lantern tip (removable) for use with European wall sockets (4 mm Ø)
- Lantern tip can be removed for easy access to terminal blocks (2 mm Ø)
- Removable, insulated IC caps allow probing on closely spaced leads and compliance with GS38.
- Cat IV 600 V, CAT III 1000 V, 10 A rating.



SureGrip™ accessories are designed to improve steadiness in slippery hands. Rubber overmolded surfaces and fingerhugging curves give the user a comfortable, reliable grip on the accessory so they can focus on making an accurate measurement.

#### **Modular Test Leads**

#### TL221 SureGrip™ Extension Lead Set

- One pair (red, black) of silicone insulated leads with straight connectors on both ends
- Reinforced strain relief
- Includes one pair (red, black) of female couplers
- Extends test leads by 1.5 m
- 600 V CAT IV, 1000 V CAT III, 10 A rating.

#### TL222 SureGrip™ Silicone Test Lead Set

- DMM test leads (red, black) with safety shrouded, standard diameter banana plugs
- Right angle connector on both ends
- Reinforced strain relief
- 1.5 meter silicone-insulated wire resists heat & cold
- CAT IV 600 V, CAT III 1000 V, 10 A rating.

#### TL224 SureGrip™ Silicone Test Lead Set

- DMM test leads (red, black) with safety shrouded, standard diameter banana plugs
- Right angle connector on one end and straight connector on the other
- Reinforced strain relief
- 1.5 meter silicone-insulated wire resists heat & cold
- CAT IV 600 V, CAT III 1000 V, 10 A rating.

#### TL27 Heavy Duty Test Lead Set

- DMM test leads (red, black) with safety shrouded, standard diameter banana plugs
- Heavy duty EPDM insulation
- Length 1.5 m
- CAT III 1000V, 10A rating.

#### H900 Test Lead Holder

- Heavy duty construction with mounting holes
- Holder has 10 slots for wires up to 8 mm in diameter
- Over-all dimensions: 27.9 cm L x 8.9 cm W x 3.2 cm H

#### **Kits**

#### TL220-1 SureGrip™ Industrial Test Lead Kit

- AC220 SureGrip™ Alligator Clip Set
- TP220 SureGrip™ Insulated Test Probe Set
- TL224 SureGrip™ Silicone Test Lead Set (right to right)
- CAT II 1000 V, 10 A (TP220 only)
- CAT III 1000 V, CAT IV 600 V with protective cap

#### TL223-1 SureGrip™ Electrical Test Lead Kit

- AC220 SureGrip™ Alligator Clip Set
- TP238 SureGrip™ Insulated Test Probe Set
- TL224 SureGrip™ Silicone Test Lead Set (straight to right)





#### TL238 SureGrip™ High Energy Test Lead Kit

- TP238 SureGrip™
   Insulated Tip Test
   Probes with less than 4
   mm of exposed metal
   (GS38) with flexible
   removable finger
   banner
- TP280 20 cm Test Probe Extenders
- TL224 SureGrip™ Silicone Test Lead Set

#### TLK-220 EUR SureGrip™ Accessory Kit

- AC220 SureGrip™ Alligator Clip Set
- AC285 SureGrip™ Large Jaw Alligator Clip Set
- TP74 Test Probe Set (4 mm)
- TL224 SureGrip™ Silicone Test Lead Set
- Large zippered soft case with moveable divider



### Industrial Test Leads, **Probes & Clips**

### FLUKE®

#### **Kits**

#### TLK-225-1 SureGrip™ Master Accessory Kit

- AC220 SureGrip™ Alligator Clip Set
- AC280 SureGrip™ Hook Clip Set
- AC283 SureGrip™ Pincer Clip Set
- AC285 SureGrip™ Large Jaw Alligator Clip Set
- TP238 SureGrip™ Insulated Test Probe Set
- TL224 SureGrip™ Silicone Test Lead Set
- 6-Pocket Storage Pouch

#### **TLK289 EUR Industrial Master Test Lead Kit**

- C116, Soft Case
- AC220 Alligator Clip Set
- AC280 Hook Clip Set
- AC285 Large Jaw Alligator Clip Set
- TP74 Lantern Tip Test Probe Set
- TL224 Test Lead Set
- TPAK Hanging Kit
- 80BK-A Temperature Thermocouple

#### **T5-KIT-1 Accessory Kit** for use with T5 This kit completes the

offering of a T5 with addon probes and carrying case. • TP238 SureGrip™

- Insulated Test Probe Set
- AC285 SureGrip™ Large Jaw Alligator Clip Set
- C33 Soft Meter Case

#### L215 SureGrip™ Kit with Probe Light and Extender

- L200 Probe Light
- TP280 20 cm Test Probe Extenders
- TP220 SureGrip Test Probes
- TL224 SureGrip Silicon Test Lead Set
- Foldable soft pouch with six pockets and hook-and-loop

#### **Modular Test Probes**

(for use with Modular Test Leads)

#### TP220-1 SureGrip™ Test Probe Set

- One pair (red, black) of Industrial test probes
- Sharp, 12 mm stainless steel tip provides reliable contact
- Flexible finger barrier improves grip
- Recommended for use with TL222 and TL224 test leads
- CAT II 1000 V, 10 A rating.
- CAT III 1000 V, CAT IV 600 V with protective cap

#### **TP74 Lantern Tip Test Probe Set**

- One pair (red, black)
- Tips include banana-style spring contacts with nickel-plated brass ends
- CAT III 1000 V, 10 A rating.

TLK290 Test Probe Kit

### **Modular Test Probes**

(for use with Modular Test Leads)

#### **TP80 Electronic Test Probe Set**

Recommended for use with TL222 and TL224

- One pair (red, black)
- IC insulated cap prevents shortening of IC legs for probing high density components or boards
- CAT III 1000 V, 10 A rating.

#### TLK291 Fused Test Probe Set

- One pair (red, black) fused test probes
- Designed to meet GS38 specs for United Kingdom
- CAT III 1000V, 0.5A
- Fuse rating: 500 mA/1000 V/FF/50 kA

#### FTP-1 SureGrip™ Fused **Test Probes**

- Built-in fuses for added protection
- 2 mm threaded probe tips include removable 4 mm lantern-style spring contacts
- Removable GS38 insulted IC caps for probing closely spaced leads
- CAT III 1000 V, CAT IV 600 V, 10A

#### • Kit includes three flexible socket probes and a large alligator clip • To be used on

- three phase sockets.
- Probes have flexible width test points that fit securely in 4 to 8 mm sockets.
- Test probe set to be used on motor and three phase sockets
- Safe contact e.g. in CEE 16 A and CEE 32 A plugs
- CAT II 1000 V, 8 A

#### TP1-1, TP2-1, TP38 SlimReach Test Probe Sets

- One pair (red, black) of slender probes for closely spaced or recessed terminals
- TP1-1: Flat blade design to hold securely in blade type wall sockets
- TP2-1: 2 mm diameter tip for electronics work. Also compatible with AC175.
- **TP38:** Insulated probe tip (designed to meet GS38 specs for United Kingdom).
- TP1-1/TP2-1: CAT II 1000 V TP38: CAT IV 600 V / CAT III 1000 V 10A rating.



- FTP Fused Test Probes with built-in fuses for added protection
- Includes TL224 Silicone Insulated Test Leads
- CAT III 1000 V, CAT IV 600 V, 10 A



### AC285-FTP Alligator Clips and Adapters

leads with this large alligator clip set. This accessory enables the use of AC285 alligator clips with FTP-1 fused probes.

• CAT III 1000 V, CAT IV 600 V, 10 A



### FLUKE ®

### Industrial Test Leads, Probes & Clips

#### **Modular Clips**

(for use with Modular Test Leads)

#### AC220 SureGrip™ Alligator Clip Set

- One pair (red, black) of small, insulated, nickel plated jaws
- Blunt tip grabs round screw heads up to 9.5 mm
- Recommended for use with TL222 and TL224 test leads
- CAT IV 600 V, CAT III 1000 V, 10 A rating.

#### AC280 SureGrip™ Hook Clip Set

- One pair (red, black) of nickel plated clips
- Profile narrows to 5.6 mm at tip, hook opening 6.4 mm at front, 2 mm at base
- Recommended for use with TL222 and TL224 test leads
- CAT IV 600 V, CAT III 1000 V, 3 A rating.

#### AC283 SureGrip™ Pincer Clip Set

- One pair (red, black) of nickel plated pincers open to 5 mm
- 11.4 cm flexible insulated shaft
- Recommended for use with TL222 and TL224 test leads
- CAT IV 600 V, CAT III 1000 V, 1 A rating.

#### **Modular Clips**

(for use with Modular Test Leads)

#### AC285 SureGrip™ Large Jaw Alligator Clip Set

- One pair (red, black) of large alligator clips with nickel-plated steel jaws
- Multi-purpose tooth pattern grips anything from fine gauge wire to a 20 mm bolt
- Recommended for use with TL222 and TL224 test leads
- CAT IV 600 V, CAT III 1000 V, 10 A rating.

#### AC87 Heavy Duty Bus Bar Clip Set

- One pair (red, black) of flat, right angle design for connecting to bus bars
- Adjustable collar provides 2 ranges of jaw openings up to 30 mm
- CAT III 600 V, 5 A rating.

### AC89 Heavy Duty Insulation Piercing Test Clip

- Single probe pierces 0.25 to 1.5 mm insulated wire
- Small pin allows self-healing of the insulation
- CAT IV 600V, CAT III 1000 V, 5 A rating.

#### **Push-on Clip**

(for use with TL71 and TL75 Test Lead Sets)

#### AC175 Alligator Clip Set

- Slide-on alligator clips (red, black) for TL175/TL71/TL75
- Jaws provide 8 mm opening
- CAT IV 600 V, CAT III 1000 V,
- 10 A rating.



All accessories have a one year warranty

### Fluke TL175 TwistGuard™ Test Leads

#### Fluke TL175 TwistGuard™ Test Leads

The Fluke Tl175 TwistGuard™ Test Leads are innovative test leads with adjustable length test tips for use in changing measurement situations. By simply twisting the test lead the user can change the exposed probe tip length from 19 mm to 4 mm.

#### TL175 TwistGuard™ Test Leads offer:

- Patented extendable tip sheath that meet new electrical safety requirements to reduce tip exposure while providing the versatility needed for most measurements
- New WearGuard™ lead wire wear indication. Each test lead is covered by two layers of silicone insulation; inner
  contrasting color is exposed when the leads are nicked, scuffed, or otherwise damaged and in need of replacement
- Double insulated silicone leads. TL175 withstands high temperatures and remain flexible in cold temperatures.
- Extra-heavy strain relief on both probe-end and plug-end, testing beyond 30,000 bends without failure.
- Universal input plugs compatible with all instruments that accept standard 4 mm shrouded banana plugs
   Ratings: CAT II 1000 V, CAT III 1000 V, CAT IV 600 V, 10 A max., Pollution Degree 2
- TL175E includes removable 4 mm lantern tips for versatility
- Probes always show correct category rating for tip being used
- Environmental ratings: -20 °C to 55 °C, altitude: 2000 m
   Conforms to latest safety standard EN61010-031: 2008
- One-year warranty
- Also available as Test Probe Set, TP175 and TP175E





## **Current Clamps**



### Specifications AC models

	i5s	i200	i200s	i400	i400s
Nominal current range(s)	5 A	200 A	20 A 200 A	400 A	40 A 400 A
Continuous AC current range	0.01 A - 6 A	0.5 A - 200 A	0.1 - 24 A 0.5 A - 200 A	5 A - 400 A	0.5 - 40 A 5 A - 400 A
Highest current	70 A	240 A	240 A	1000 A	1000 A
Lowest measurable current	10 mA	0.5 A	0.5 A	1 A	0.5 A
Basic accuracy (48-65 Hz) 1)	1%	1% + 0.5 A	1.5% + 0.5 A	2% + 0.15	2% + 0.15
Jseable frequency	40 Hz - 5kHz	40 Hz - 10 kHz	40 Hz - 10 kHz	45 Hz - 3 kHz	45 Hz - 3 kHz
Max. working voltage	600 V AC	600 V AC	600 V AC	1000 V	1000 V
Maximum conductor diameter	15 mm	20 mm	20 mm	32 mm	32 mm
Output level(s)	400 mV/A	1 mA/A	100 mV/A 10 mV/A	1 mA /A	10 mV/A 1 mV/A
Batttery, battery life					
Output cable (m)	2.5	1.5	2.0	1.5	2.5
Shrouded banana plugs		•		•	
BNC connector	•		•		•
BNC to banana adapter included			•		
Safety	CAT III, 600 V	CAT III. 600 V	CAT III, 600 V	CAT III 1000 V / CAT IV 600 V	CAT III 1000 V / CAT IV 600 V

<sup>&</sup>lt;sup>1)</sup> Basic Accuracy: % reading + floorspec













i800	i1000s	i2000 flex	i3000s	flex	i3000s	i6000s flex
	i800	i1000s	i2000 flex	i3000s flex-24 i3000s flex-36	i3000s	i6000 flex-24 i6000s flex-36
Nominal current range(s)	800 A RMS	10 A 100 A 1000 A	20 A 200 A 2000 A	30 A 300 A 3000 A	30 A 300 A 3000 A	60 A 600 A 6000 A AC
Continuous AC current range	0.1 A - 800 A RMS	0.1 A - 10 A 0.1 A - 100 A 1 A - 1000 A	1 A - 20 A 2 A - 200 A AC RMS 30 A - 2000 A	1 A - 30 A 2 A - 300 A AC RMS 30 A - 3000 A	1 A - 30 A 1 A - 300 A 1 A - 2400 A	1 A - 6000 A AC RMS
Highest current	1500 A	2000 A	2500 A AC RMS	3500 A AC RMS	4000 A	6000 A
Lowest measurable current	0.1 A	0.1 A	1 A	1 A	1 A	1 A
Basic accuracy (48-65 Hz) 1)	0.10%	1% + 1 A	1%	1%	2% + 2 A	± 1% of range
Useable frequency	30 Hz - 10 kHz	5 Hz - 100 kHz	10 Hz - 20 kHz (-3dB)	10 Hz - 50 kHz (-3dB)	10 Hz - 100 kHz	10 Hz to 50 kHz
Max. working voltage	600 V AC RMS or DC	600 V AC	600 V AC RMS	600 V AC RMS	600 V AC	600 V AC RMS or DC
Maximum conductor diameter	54 mm	54 mm	178 mm	Flex-24 178 mm Flex-36 275 mm	64 mm	Flex-24 170 mm Flex-36 275 mm
Output level(s)	1 mA/A	100 mV/A 10 mV/A 1 mV/A	100 mV/A 10 mV/A 1 mV/A	100 mV/A 10 mV/A 1 mV/A	10 mV/A 1 mV/A 0.1 mV/A	50 mV/A 5 mV/A 0.5 mV/A
Batttery, battery life			200 hours	400 hours		400 hours
Output cable (m)	1.6	1.6	0.5	0.5	2.1	0.5
Shrouded banana plugs	•		•	n/a		
BNC connector		•	n/a	•	•	•
BNC to banana adapter included			n/a	•	•	•
Safety	CAT III, 600 V	CAT III, 600 V	CAT III, 600 V	CAT III, 600 V	CAT III, 600 V	CAT III, 600 V

 $<sup>^{1)}</sup>$  Basic Accuracy: % reading + floorspec

## **Current Clamps**



#### Specifications AC/DC Models

	80i-110s	i30	i30s	i310s	i410	i1010
Measurement type	Hall sensor	Hall sensor	Hall sensor	AC/DC	Hall sensor	Hall sensor
Nominal current range(s)	10 A, AC/DC 100 A, AC/DC	20 A AC RMS or DC	20 A AC RMS or DC	30/300 A AC RMS or 45/450 A DC	400 A, AC/DC	600 A, AC 1000 A, DC
Continuous current range	0.1 A - 10 A AC/DC 1 A - 100 A AC/DC	30 A AC Peak	30 A AC Peak	100 mA - 300 A AC RMS or 450 A DC	1 A - 400 A AC/DC	1 A - 600 A, AC 1 A - 1000 A, DC
Highest current	140 A - 2 kHz	30 A AC Peak	30 A AC Peak	300 A AC RMS or 450 A DC	400 A	1000 A
Lowest measurable current	0.1 A	50 mA	50 mA	100 mA	0.5 A	0.5 A
Basic accuracy 1)	3% + 50 mA (@ 10 A)	± 1% of reading ±2 mA	± 1% of reading ±2 mA	±1% of reading	3.5% + 0.5 A	2% +0.5 A
Useable frequency	DC - 100 kHz	DC to 20 kHz (-0.5dB)	DC to 100 kHz (-0.5dB)	DC to 20 kHz	DC - 3 kHz	DC - 10 kHz
Zero error adjustment	•	manual adjust via thumbwheel	manual adjust via thumbwheel	Manual	•	•
Max. working voltage	600 V	300 V AC RMS	300 V AC RMS	300 V AC RMS or DC	600 V	600 V
Maximum conductor diameter	11.8 mm	19 mm	19 mm	19 mm	30 mm 2 x 25 mm	30 mm 2 x 25 mm
Output level(s)	100 mV/A 10 mV/A	100 mV/A	100 mV/A	10/1 mV/A	1 mV/A	1 mV/A
Battery, battery life	9 V, 55 h	30 hours typical	30 hours typical	30 hours	9 V, 60 h	9 V, 60 h
Output cable length (m)	1.6	1.5	2	2	1.6	1.6
Shrouded banana Plugs		•	n/a		•	•
BNC connector	•	n/a	•	•		
BNC to banana adapter included		n/a	•	•		
Safety	CAT II, 600 V CAT III, 300 V	CAT III, 300 V	CAT III, 300 V	CAT III 300 V	CAT III, 600 V	CAT III, 600 V

<sup>1)</sup> Basic Accuracy: % reading + floorspec



#### i410 Kit AC/DC Current Clamp (400A) with soft case i1010 Kit AC/DC Current Clamp (1000A) with soft case

- Combination of current clamp with carrying case
- Zipped soft case with moveable divider
- Soft case is large enough to hold a meter

#### **Current Clamp Compatibility Chart**

	113/114/115/116/117	175/177/179	233	287/289	2711 / 2811	3000FC	8845A/8846/8808A	VI 77	83V/87V/88V	43B	430 Series II	123/124/125	190 Series II	1577/1587	715/724/725	753/754	787/789
AC Models																	
i5s											•		•				
i200	4	•	•	•	•	•	•	•	•					•			•
i200s	•	•	•	•	•	•	•	•	•			•	•	•		•	•
i400		•	•	•	•	•	•	•	•					•			•
i400s	2	2	2	2	2	2	2	2	2	•	•	•	•	2		2	2
i430 flexi-TF-II											•						
i800	4	•	•	•	•	•	•	•	•					•			•
i1000s	2	2	2	2	2	2	2	2	2	•		•	•	2		2	2
i2000 flex (new version)	•	•	•	•	•	•	•	•	•	3	3	3	3	•			•
i3000s	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•
i3000s flex	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•
i6000s flex	•	•	•	•	•	•	•	•	•		•			•		•	•
AC/DC Models																	
i30	•	•	•	•	•	•	•	•	•					•			•
i30s	•	•	•	•	•	•	•	•	•	•	•	•	•				
80i-110s	2	2	2	2	2	2	2	2	2	•	•	•	•	•		2	2
i310s	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•
i410 / i410 kit	•	•	•	•		•	•	•	•			3	3	•	1	•	•
i1010 / i1010 kit	•	•	•	•	•	•	•	•	•			3	3	•	1	•	•
Other																	
90i-610s*	2	2	2	2	2	2	2	2	2			•	•	2		2	2

<sup>\*</sup> For specifications of 90i-610s see page 154 1 For DC only 2 Requires PM 9081 (see page 103) 3 Requires PM 9082 (see page 103) 4 115, 117 only



### **Temperature Accessories**

#### **Contact Probes**

#### 80PK-22 SureGrip™ Immersion Probe

- Type-K thermocouple for use in liquids and gels
- Measurement range: -40 to 1090°C
- Probe length: 21.3 cm

#### 80PK-1 and 80PJ-1 Bead Probe

- 80PK-1: Type-K thermocouple for general purpose applications
- 80PJ-1 operates with J-type thermometers Measurement range:
- -40 to 260°C

#### **DMM Probes**

#### 80AK-A Thermocouple Adapter

- Adapts Type-K thermocouple mini-connector to dual banana plug inputs
- Measurement range and accuracy: probe dependent
- Suitable for low voltage applications (below 30 V AC, 60 V DC)



### 80PK-24 SureGrip™ Air Probe

- Type-K thermocouple for use in air and non-caustic gas measurements
- Bead protected by perforated baffle
- Measurement range: -40 to 816°C
- Probe length: 21.6 cm

#### 80PK-3A Surface Probe

- Type-K thermocouple for flat or curved surfaces such as plates and rollers
- Measurement range: 0 to 260°C
- Probe length: 9.5 cm



- Type-K thermocouple with standard banana jack Convenient one piece
- construction Compatible with DMMs
- with temperature measurement functions
- Measurement range: -40 to 260°C



- Converts a DMM to a thermometer
- For use with type-K thermocouples in low voltage applications (below 24 V AC, 60 V DC)
- Measurement range: -50 to 1000°C (probe dependent)

#### 80PK-25 and 80PT-25 SureGrip™ **Piercing Probe**

- 80PK-25: Type-K thermocouple suitable for food industry, liquids and gels
- 80PT-25 operates with T-type thermometers
- Measurement range: 80PK-25: -40 to 350°C 80PT-25: -196 to 350°C
- Probe length: 10.2 cm

#### 80PK-8 / 80PK-10 Pipe Clamp **Temperature Probe**

- Type-K thermocouple for fast temperature and superheat measurements of pipe surfaces
- Durable ribbon sensor
- Measurement range: -29 to 149°C for pipe diameters from 6.4 to 34.9mm (80PK-8) and 32 mm to 64 mm (80PK-10)

#### 80T-150UA Universal Temperature Probe

- Compatible with Fluke DMM
- High accuracy, fast reading for low voltage (below 24 V AC, 60 V DC) applications
- Measurement range: -50 to 150°C
- Output: 1 mV/°C or 1 mV/°F (switchable)

#### 80PK-26 SureGrip™ General Purpose **Probe**

- Type-K thermocouple with tapered tip for use in air, non-caustic gas and surface applications
- Measurement range: -40 to 816°C
- Probe length: 21.2 cm

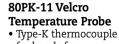
#### 80PK-9 and 80PJ-9 General **Purpose Probe** 80PK-9: Type-K thermocouple surface,

- air and non-caustic gases 80PJ-9 operates with
- J-type thermometers Measurement range:
- -40°C to 260°C
- Probe length: 15.3 cm



### 80PK-27 SureGrip™ Industrial Surface

- Type-K thermocouple for surfaces in rugged environment
- Durable ribbon sensor
- Measurement range: -127 to 600°C
- Probe length: 20.3 cm



- for hands free measurement of **HVAC** temperature measuring applications
- Total length of cable: 1m (0.5m in cable, 0.5m in Velcro cuff insulation material; Hytrel)
- Measurement range: -30°C to 105°C



SureGrip™ accessories are designed to improve steadiness in s lippery hands. Rubber overmolded surfaces and fingerhugging curves give the user a comfortable, reliable grip on the accessory so they can focus on making an accurate measurement.







### **Temperature Accessories**

#### Other Temperature Accessories

#### 80PK-18 Pipe Clamp Temperature **Probe Kit**

- 80PK-8 Pipe Clamp Temperature Probe
- 80PK-10 Pipe Clamp Temperature Probe
- Soft Case



#### 80CK-M & 80CJ-M type K & J Male **Mini-Connectors**

- Isothermal screw terminal for K or J wire
- Suitable for up to 20 guage thermocouple wire
- Color coded to industry standards (K-yellow, J-black)
- Two per package







#### 80PK-EXT, 80PJ-EXT and **80PT-EXT Extension Wire Kits**

- Extending and repairing J, K ot T-type thermocouple wires
- Kit includes 3 meters of thermocouple wire and 1 pair of male/female mini-connectors
- Maximum continuous exposure temperature: 260°C
- 80PK-EXT is compatible with K-type thermometers, 80PJ-EXT is designed for J-type thermometers and PT-EXT for T-type thermometers



#### Thermocouple Plug Kits 700TC1

A kit of 10 mini-plug connectors Type J (black), one Type K (yellow), one Type T (blue), one Type E (purple), one Type R/S (green), one Type B or CU (white), one Type L (J-DIN) (blue), one Type U (T-DIN) (brown), one Type C (red), one Type N (orange), one



A kit of 7 mini-plug connectors Type J (black), two Type K (yellow), two Type E (purple), one Type T (blue), one Type R/S (green), one



#### Temperature Probe Compatibility Chart

	113/114/115/116/117	175/177	179	233	3000FC DMM	287/289	2711 / 2811	8845A/8846A/8808A	VI77	83V	87V/88V	43B	120 Series	190 Series II	1577	1587	51/52/53/54 II	561	566/568/572-2	705/707	714	715	724/725	753/754	787/789
<b>Contact Probes</b>																									
80PK-1 80PK-27	1	1	2	2	2	2	2	1	1	1	2	1	1	1	1	2	•	•	•	1	•	1	•	•	1
80PJ-1, 80PJ-9																	•				•		•	•	
80PT-25																	•				•		•	•	
DMM probes																									
80AK-A	●3)		•	•	•	•	•				•					•									
80BK-A	●3)		•	•	•	•	•				•					•									
80TK		•						•	•	•		•	•	•	•					•		•		•	•
80T-150UA		•	•	•	•	•	•	•	•	•		•	•	•	•					•		•		•	•
Miscellaneous																									
80CK-M	1	1	2	2	2	2	2	1	1	1	2	1	1	1	1	2	•	•	•	1	•	1	•	•	1
80CJ-M																	•				•		•	•	
80PK-EXT4)	1	1	2	2	2	2	2	1	1	1	2	1	1	1	1	2	•	•	•	1	•	1	•	•	1
80PJ-EXT																	•				•		•	•	
80PT-EXT																	•				•		•	•	
700TC1, 700TC2																	•				•		•	•	

<sup>1)</sup> Requires 80TK

<sup>2)</sup> Requires 804K 3) Fluke 116 only 4) Also requires 80CK-M



## **Cases and Holsters**

#### **Soft Cases**

Zipped carrying cases protect your meter; most cases come with belt loops so your meter is stored conveniently on your tool belt.



#### C195

- Zipped carrying case with storage compartments
- Allows hand or shoulder use



#### C789

 Large fabric carrying case with 3 compartments, removable handle and shoulder strap



#### C550 Tool Bag

- Steel reinforced frame
- Rugged ballistic cloth with heavy duty hardware
- Large zippered storage compartment with 25 pockets
- Weather resistant
- Carry all your tools to the job



#### Cases & Holsters Compatibility Chart

		16/117												06/332/900		7/1587		ies		10					72-2		17				
		113/114/115/116/117	175/177/179	233	3000FC DMM	287/289	2711 / 2811	VI 77	83V/87V/88V	TS	T90	T100 Series	323/324/325	333/334/335/336/337/902	353/355	1503/1507/157/1587	9040/9062	1735/1740 Series	430 Series II	43B/120 Series	190 Series II	922	971	51/52/53/54 II	561/566/568/572-2	705/707	712/714/715/717	718/719	724/725/726	753/754	787
t Cases	Size (HxWxD) mm	17	-	2	m	7	7		00	I	I	Η.	m	m	3	1	9	-	4,	4	1	9	ص ا	2	2	_	7		_	_	
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	225 x 95 x 58	•						•					•									•	•			$\overline{}$		H	$\Box$	-	_
	218 x 128 x 64	•	•		•			•	•				Ť			•	•					•	•	•			•		•		•
	280 x 115 x 55		Ť					•				•		•												$\Box$			M		•
	220 x 140 x 65	•	•	•	•		•	•	•			-		-		•						•		•		•	•		$\Box$	-	Ť
	318 x 230 x 90		1		_		-	-	-						•					•				_		$\overline{}$		•	•	-	_
)	192 x 90 x 38	•																						•		$\neg$		H	$\overline{}$	-	_
,	179 x 103 x 26		nultipl	le test	t leads	s and	acces	sories																							_
)	205 x 90 x 72	1.01.	•				1	•														•				$\Box$				$\neg$	_
15	240 x 205 x 75	•	•		•			•	•							•				•				•		•	•	•	$\Box$	-	_
16	240 x 230 x 65	•	•	•	•	•	•	•	•							•				•			$\neg$	·		•	•	H	$\Box$	-	_
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95	231 x 513 x 231										Ť	Ť		Ť					•	•	•		$\neg$		_	$\overline{}$		H	-	_	Ť
80	230 x 185 x 65	•	•	•	•	•	•	•	•							•			Ť	•	_		$\neg$	•	_	•	•	•	•	$\rightarrow$	•
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90	410 x 474 x 135																				•					$\neg$		$\vdash$	$\vdash$	-	_
:35	565 x 476 x 305																	•	•		•		$\overline{}$		_	$\neg$		H	$\vdash$	-	_
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T170	28 x 32 x 13				_			•	-							•				$\vdash$		•	-		-	$\overline{}$	•	•		-	•
T280	28 x 32 x 13		$\vdash$			•		-								_				$\vdash$	_	-	$\rightarrow$		-	$\overline{}$	_		$\vdash$	$\rightarrow$	Ť
ather Cases	28 X 32 X 13																														
in cases	287 x 179 x 106		•		•		T	•	•			_				•								•			•		•		•
20A	256 x 154 x 106		-		-			-	-	•						•						-		•		$\vdash$	•	$\vdash$	_	-+	_
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5	192 x 90 x 38 302 x 178 x 57 279 x 92 x 51										•	•													•				$\Box$		



### **Cases and Holsters**

#### **Hard Cases**

#### **C20 Meter Case**

- Heavy duty case with carrying handle and accessories storage compartment
- Top cover snaps onto back to serve as tilt stand



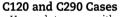
#### C100 Meter and **Accessory Case**

• Tough polyprophylene case

#### C101 Hard Case

The hard case that fits all Fluke industrial test tools. Configure the diced foam interior to store and protect what you need to carry with you.

- Tough polyprophylene exterior shell
- Interior cavity measures



· Heavy duty cases with accessory storage compartments



#### **Holsters**

#### C10 Meter Holster

- Snap-on yellow holster absorbs shocks and protects meter from rough handling
- Includes built-in stand and hanger loop



#### H3 Clamp Meter Holster

- Fabric holster absorbs shocks and protects meter from rough handling.
- Built-in pocket for lead storage
- Convenient belt-loop with snap

#### H80M Holster + Magnetic Hanger

- Snap-on yellow holster absorbs shocks and protects meter from rough handling
- Magnet, hook and loop
- General purpose hanger



#### H5 Electrical Tester Holster

- · Rugged fabric holster includes flap for lead storage and built-in belt
- testers



#### **H15 Electrical Tester Holster**

• High quality 1000D fabric



#### **H6 Infrared Thermometer Holster**

- Durable nvlon holster
- For Fluke 63, 66 and 68 Infrared Thermometers



#### C435 Hard Rolling Case

• Watertight hard case with rollers for 430 Series, 1735 and 1740 Series Power Quality products and accessories. The configurable foam securely holds any of these instruments during transit.



#### **Leather Cases**

#### **C510 Leather Meter Case**

- Oiled genuine top grain cowhide Rugged construction with heavy duty
- stitching and reinforced rivets
- Large tool belt loop and top flap to secure meter
- Holds most Fluke DMMs, Thermometers, and **Process Calibrators**



#### C520A Leather Tester Case

- Oiled genuine top grain cowhide
- Oil tanned for long life
- Rugged construction with heavy duty stitching and reinforced rivets
- Large tool belt loop and top flap to secure tester
- Holds Fluke Electrical Testers



#### C1600 Meter and Accessories Case

- Rugged molded plastic case
- Deep interior large enough to hold and protect your tools
- Lift out tray keeps everything organized
- Snap open compartment on top of lid



#### CXT80, CXT170, CXT280 Rugged Pelican **Hard Case**

• Unbreakable, watertight, airtight, dustproof, chemical resistant and corrosion proof case





## **Automotive Accessories**

#### **Piercing Clips**

#### TP81 and TP82 Insulation Piercing Clip Set

- Banana jack accepts all DMM and banana jack leads
- Available for 4 mm input, modular connection with TP81 or available as a 2 mm input to slip onto probe tips with the TP82
- Tested to 60 V DC

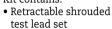
#### **Pressure Module**

#### **PV350 Pressure Vacuum Module**

- Compatible with all Fluke and most popular
- Digital pressure and vacuum measurements in a single module
- Transducer sealed in 316 stainless steel compatible with variety of liquids and gases
- Measures vacuum to 76 cm Hg
- Display results in English (psig or Hg) or metric (kPa or cm Hg) units
- Measures pressure to 500 psig (3447 kPa)

#### TL 82 Automotive Pin & Socket Adapter Kit

This set of male and female adapters allows you to make firm connection to pin and socket connectors. Kit contains:



- Complete set of 8 pin-and-socket adapters with flexible tips
- One red and black in different sizes
- Rated to 60 V DC

#### **Current Probe**

#### 90i-610s AC/DC Current Probe (600 A)

- Current Range: 2 to 600A DC or AC Peak
- Basic Accuracy (DC to 400Hz):  $\pm$  (2% of reading + 1A)
- Output Signal: 100A range: 10mV/A 600A range: 1mV/A
- Frequency Range: 40Hz to 400Ĥz
- Working Voltage: 600V AC rms
- Maximum Conductor Diameter: 34 mm



#### **Probe Pins**

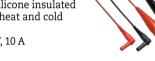
#### TP88 Rigid Back Probe Pin Set

- Slides onto test probes measuring 2 mm
- Tested to 60 V DC

### **Test Leads**

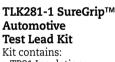
#### **TL28A Automotive Test Lead Set**

- Flexible silicone insulated leads are heat and cold resistant
- CAT I 30 V, 10 A



#### **TP40 Automotive Back Probe Pins (five)**

- Banana jack accepts all DMM and banana jack leads (4 mm)
- Tested to 60 V DC



- TP81 Insulation Piercing Clip Set
- TL224 Suregrip™ Silicone Test Lead

- TP220 Suregrip™ Test Probe Set
   AC220 Suregrip™ Alligator Clip Set
   AC285 Suregrip™ Large Jaw Alligator Clip Set
- Soft Case



#### RPM80 Inductive Pick-up

• Provides RPM readings



#### ScopeMeter Accessory Kits

SCC128 Automotive Accessory Kit (120 Series)



#### SCC198 Automotive Accessory Kit (190 Series)



These kits provide a host of accessories that allow you to easily and quickly make measurements on automotive electronic systems using a 120 or 190 Series ScopeMeter.

#### Banana Plugs

#### **BP880 BNC to Female Double** Stacking Banana Plug **BP881 BNC to Male Double Stacking** Banana Plug

- Allows for hands-free testing in controlled voltage environments 500 VRMS maximum
- Banana plug is nickelplated, beryllium copper for low contact resistance
- The BNC shell is plated for tarnish resistance
- Operating temperature +50°C maximum

#### TLK282-1 SureGrip™ **Deluxe Automotive** Test Lead Kit

Kit contains:

- TP81 Insulation Piercing Clip Set
- TP40 Automotive **Back Probe Pins** (five)
- TL224 Suregrip™ Silicone Test Lead Set

- TP238 Suregrip™ Insulated Test Probe Set
   AC220 Suregrip™ Alligator Clip Set
   AC285 Suregrip™ Large Jaw Alligator
- AC280 Suregrip $^{\text{TM}}$  Hook Clip Set
- Soft Case



### **Software and other Accessories**



#### Fluke Connect ir3000FC Connector

#### Hanging Kit

## Fluke Connect ir3000 FC Connector allows you to wirelessly transfer data from your existing Fluke Tools to your smart phone.

- Get all the benefits of the Fluke Connect™
   app, and be on the same page, even while in
   different places
- Wirelessly share measurements with your team—anywhere, anytime
- Connect the Fluke 289/287 True-rms Logging Multimeter and the 789 ProcessMeter with the ir3000FC Connector



#### ToolPak (TPAK)

The meter hanging solution

- Kit includes, universal hanger clips (2), hook
   loop straps (2 lengths) and strong magnet
- Combine components to meet most hanging needs

See page 152 for compatibility chart.



#### Fluke Connect Wireless PC Adapter pc3000FC

The Fluke 3000 FC Wireless Test Tools are a team and the modules are team players. You connect any of the Fluke Connect™ Modules to your test point and then view the results through Windows® software on your PC - up to 20 meters (65.6 feet) away. Save time and conduct more tests with less trips. The pc3000 FC Adapter and Software wirelessly collects up to 65,000 sets of time stamped min/max/avg readings from FC remote modules.







#### Fluke Connect Wireless SD Card

Wirelessly enable your Fluke thermal camera with the Fluke Connect™ wireless SD card and you can instantly upload, share and analyze data from anywhere, with anyone on your team, at any time.



#### Fiber Optics

#### **FOM Fiber Optic Meter**

The Fluke Fiber Optic Meter (FOM) helps you test and maintain fiber optic cables without having to buy a whole new meter. Plug the FOM directly into any DMM with a mV dc function and a  $10~M\Omega$  input impedance and quickly and accurately verify fiber optic cable system loss. Light sources and patch cords sold separately.

#### FOS 850 & FOS 850/1300 Fiber Optic Light Sources

A variety of light sources allow you to test different cable lengths.

#### Software FlukeView® Forms

FlukeView Forms increases the power of your Fluke tool by enabling you to document, store and analyze individual readings or series of measurements, then convert them into professional-looking documents. FlukeView Forms supports the following multimeters:



#### FlukeView Forms Compatibility Chart

<b>FVF Option</b>	Instrument	Cable**	Application Level				
FVF-UG	Software only upgrade, Any instrument that supports Flukeview Forms Software	No Cable included	FVF Full				
FVF-SC2	Fluke 280 Series, 789, 1550B, 1653B, 568,180 Series*, 53B, 54B	0 Series, 789, 1550B, 1653B, 568,180 Series*, 53B, 54B USB / IR					
FVF-SC4	Fluke 8808A, 8845A, 8846A, 45*, 975	USB / Serial	]				
FVF-BASIC	Fluke 280 Series, 789, 1550B, 1653B, 180 Series*	USB / IR	EVE DACIC				
FVF-SC5	8808A, 8845A, 8846A, 45*	USB / Serial	FVF BASIC				

<sup>\*</sup> Obsolete

<sup>\*</sup> Obsolete \*\* USB cables are not supported for Microsoft Windows NT 4.0



### **Other Accessories**

#### Make extended logging easier

#### **BP189 High Capacity Battery Enclosure**

(for Fluke 180 Series DMM)

- Expand the battery life of your Fluke 187/189 up to 450 hours (over two weeks of continuous use).
- Houses 4 'C' cell batteries.
- CAT III 1000 V, CAT IV 600 V

Batteries and meter sold separately



#### **High Voltage Probes**

#### 80K-6 and 80K-40

A high voltage probe that allows a multimeter to measure up to 6,000V or 40.000V respectively.

Intended for low energy applications only

#### Lights

#### L200 Probe Light

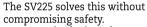
- Attaches to any Fluke test probe
- Bright white LÉD
- 120 hours of battery life



#### Stray Voltage Adapter

#### **SV225 Stray Voltage Adapter**

Stray voltage can appear in electrical installations, due to the capacity between wires. This may result in erroneous readings on high impedance



- · On energized wires, the meter will indicate the real voltage.
- · On non-energized circuits the meter will read close to zero (even if there are stray voltages).
- It can be used with all modern meters with standard input spacing.
- Rated CAT III 1000 V, CAT IV 600 V

## **Meter Cleaners**

#### MC6 MeterCleaner™ Wipes (6-pack)

#### MC50 MeterCleaner™ Wipes (50-pack)

- · Pre-moistened wipe removes dirt, oil and
- One wipe easily cleans one meter
- Safe on rubber, plastic and for environment (non-toxic)



#### L205 Mini Hat Light

Rugged high-intensity Xenon worklight

- Attaches to a baseball cap
- Includes a hat clip
- Includes two AAA batteries
- Waterproof

#### L206 Deluxe LED Hat Light (hard hat not included)

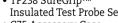
Attach it to a hard hat, a baseball cap, or even a panel door for all the light you need.

- 3 super bright white LEDs – never burn out
- Special hard-hat attachment included
- 40-hour battery life
- Includes three AAA batteries

#### TL225-1 SureGrip™ Stray Voltage Adapter Test Lead Kit

Kit includes:

- SV225 Stray Voltage Eliminator
- TL224 SureGrip™ Silicone Test Lead Set (right to straight)
- TP238 SureGrip™ Insulated Test Probe Set



• C75 Accessory Case

#### L210 Probe Light + **Probe Extender**

- Includes L200 Probe Light and TP280 Test Probe Extenders
- 20 cm probe extenders keep hands away from live circuits
- Extender fits between modular test probe and test lead (total reach 30 cm)



FVF-Basic) For customers who want to

upgrade from their existing RS232 cable

 Small adapter to connect the cable to the 189, 287, 289, 1653B or the 1550B is included.



### **Fuse and Warranty Information**



#### **Fuse Replacement Information**

A	v	IR	Size in mm	Part nr qty 1					
63mA (slow)	250V		6.35x32	163030					
125mA (slow)	250V		6.35x32	166488					
250mA (slow)	250V		6.35x32	166306					
315 mA	1000V	10KA	6.35x32	2279339					
440mA	1000V	10kA	10.3x34.9	943121					
500mA	250V	1500A	5x20	838151					
630mA	250V	1500A	5x20	740670					
1A	600V	10kA	10.3x34.9	830828					
1A	500V	50kA	6.35x 32	2530449					
1.25A	600V		6.35x32	2040349					
3.15A	500V		6.35x32	2030852					
11A	1000V	17kA	Replaced by 11A	A, 1000V, 20kA fuse; 803293					
11A	1000V	20kA	10.3x38.1	803293					
15A	600V	100kA	10.3x38.1	892583					
20A	600V	Replace	Replaced by 15A, 600V, 100kA fuse; part nr. 892583						

See the back of your Fluke test tool or user manual for the fuses installed. For manuals check the Fluke website in the product section. For Fuse Replacement Guide check the Fluke website in the service section.

Thurlby Thandar Instrument Distribution Glebe Road, Huntingdon, PE29 7DR, UK +44 (0)1480 412 451



#### **Product Warranty**

Each Fluke product is warranted to be free from defects in material and workmanship under normal use and service, for the warranty period listed unless local law requires a longer period. The warranty period is listed in the ordering information section of the product specification and begins on the date of shipment. This warranty extends only to the original buyer or end-user customer of a Fluke authorized reseller, and does not apply to fuses, disposable batteries or to any product which, in Fluke's opinion, has been misused, altered, neglected or damaged by accident or abnormal conditions of operation or handling. Fluke warrants that software will operate substantially in accordance with its functional specifications for 90 days and that it has been properly recorded on non-defective media. Fluke does not warrant that software will be error free or operate without interruption.

#### Lifetime Warranty

Each Fluke 20, 70, 80, 170, 180 and 280 Series DMM purchased after October 1, 1996 will be free from defects in material and workmanship for its lifetime. This warranty does not cover fuses, disposable batteries and damage from accident, neglect, contamination, misuse or abnormal conditions of operation or handling, including overvoltage failures caused by use outside the DMM's specified rating, or normal wear and tear of mechanical components. This warranty covers the original purchaser only and is not transferable. For ten years from the date of purchase, this warranty also covers the LCD. Thereafter, for the lifetime of the DMM, Fluke will replace the LCD for a fee based on then current component acquisition costs.

To establish original ownership and prove date of purchase, please complete and return the registration card accompanying the product.

#### Service

Fluke will, at its discretion, repair at no charge, replace or refund the purchase price of a defective product purchased through a Fluke authorized sales outlet and at the applicable international price. Fluke reserves the right to charge for importation costs of repair/replacement parts if product purchased in one country is sent for repair elsewhere.

Send defective product with a description of the problem to the nearest Fluke Authorized Service Center, postage and insurance prepaid. Fluke will pay return transportation for product repaired or replaced inwarranty. Before making any non-warranty repair, Fluke will estimate cost and obtain authorization, then invoice you for repair and return transportation.

THIS WARRANTY IS YOUR ONLY REMEDY. NO OTHER WARRANTIES, SUCH AS FITNESS FOR A PARTICULAR PURPOSE, ARE EXPRESSED OR IMPLIED. FLUKE IS NOT LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LOSSES, INCLUDING LOSS OF DATA, ARISING FROM ANY CAUSE OR THEORY. AUTHORIZED RESELLERS ARE NOT AUTHORIZED TO EXTEND ANY DIFFERENT WARRANTY ON FLUKE'S BEHALF.

Since some states do not allow the exclusion or limitation of an implied warranty or of incidental or consequential damages, this limitation of liability may not apply to you.