KPS

MEASURING INSTRUMENTS

INFRARED CAMERAS
DIGITAL CLAMP METERS
DIGITAL MULTIMETERS
TEST LEADS
VOLTAGE AND CONTINUITY METERS
HIGH VOLTAGE DETECTION POLES
RESISTANCE AND INSULATION METERS
ENVIRONMENTAL METERS
INDUSTRIAL MEASUREMENT EQUIPMENT

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INFRARED CAMERAS

• KPS-IR9 Dual infrared camera high resolution 384 x 288 pixels

- 384 x 288 pixels sensor
- Thermal sensitivity of 0,1ºC@30ºC
- Field of view of 21,7 x 16,4 °
- Thermal images as well as visual images through 2Mpx camera
- Thermal and visual image blending function
- Video recording in PC through USB connection or in SD card
- Voice annotation, 60 seconds per image
- Motorized focusing of IR lens
- Electronic zoom 4x
- 8 colour palettes
- 3,6" high resolution TFT screen
- Measured temperature from -20ºC to 250ºC
- Accuracy of ±2ºC or ±2% of reading
- Movable temperature spot and automatic maximum temperature spot
- Temperature alarms
- Area definition with maximum, minimum and average temperature determination (IrAnalyser)
- Isotherms definition (IrAnalyser)
- Emissivity correction from 0,01 to 1
- Automatic temperature correction based on emissivity, distance, relative humidity, atmospheric transmission, external optics and dew point
- Laser pointer Class II
- Images saved into SD card of 4GB (1.000 images and built-in memory (100 images)
- Images saved as JPG files
- PC communication through USB 2.0 port
- Supplied by rechargeable batteries NiMH AA or alkaline batteries AA
- Battery operating time over 2 hours
- IP54 degree
- Weight of 1kg (battery included)
- Image analysis software IrAnalyser
- Accessories included: AC adapter, rechargeable batteries, MiniSD 4GB card, card reader, USB cable, analysis software, carrying bag and heavy duty case
- Optional accessories: 42 and 70mm tele lenses, 13mm wide angle lens, tripod mount
- ISO9001 calibration certificate included

Article	Code	EAN 13	Characteristics
KPS-IR9	603550005	8435394725772	High resolution 384x288 pixels

INFRARED CAMERAS

• KPS-IR4 Dual infrared camera 160 x 120 pixels, voice and video recording

- 160 x 120 pixels sensor
- Thermal sensitivity of 0,1°C@30°C
- Field of view of 20,6 x 15,5 °
- Thermal images as well as visual images through 2Mpx camera
- Thermal and visual image blending function
- Video recording in PC through USB connection
- Voice annotation, 60 seconds per image
- Automatic motorized focusing of IR lens
- Electronic zoom 2x
- 8 colour palettes
- 3,6" high resolution TFT screen
- Measured temperature from 0°C to 250°C
- Accuracy of ±2°C or ±2% of reading
- Movable temperature spot and automatic maximum temperature spot
- Temperature alarms
- Area definition with maximum, minimum and average temperature determination (IrAnalyser)
- Isotherms definition (IrAnalyser)
- Emissivity correction from 0,01 to 1
- Automatic temperature correction based on emissivity, distance, relative humidity, atmospheric transmission and external optics
- Laser pointer Class II
- Images saved into SD card of 2GB (2.000 images) and built-in memory (200 images)
- Images saved as JPG files
- PC communication through USB 2.0 port
- Supplied by rechargeable batteries NiMH AA or alkaline batteries AA
- Battery operating time over 2 hours
- IP54 degree
- Weight of 0,73kg (battery included)
- Image analysis software IrAnalyser
- Accessories included: AC adapter, rechargeable batteries, MiniSD 4GB card, card reader, USB-cable, analysis software, carrying bag and heavy duty case.
- Optional accessories: 30mm tele lens, 7mm wide angle lens
- ISO9001 calibration certificate included

Article	Code	EAN 13	Characteristics
KPS-IR4	603550004	8435394725765	160x120 pixels, DUAL, voice and video recording

INFRARED CAMERAS

• KPS-IR2 Infrared camera 160 x 120 pixels

- 160 x 120 pixels sensor
- Thermal sensitivity of 0,1ºC@30ºC
- Field of view of 20,6 x 15,5 °
- Thermal images as well as visual images through 2Mpx camera
- Thermal and visual image blending function
- Motorized focusing of IR lens
- Electronic zoom 2x
- 6 colour palettes
- 3,6" high resolution TFT screen
- Measured temperature from -20ºC to 250ºC
- Accuracy of ±2ºC or ±2% of reading
- Movable temperature spot and automatic maximum temperature spot
- Temperature alarms
- Emissivity correction from 0,01 to 1
- Automatic temperature correction based on emissivity, distance, relative humidity, atmospheric transmission and external optics
- Laser pointer Class II
- Area definition with maximum, minimum and average temperature determination (IrAnalyser)
- Isotherms definition (IrAnalyser)
- Images saved into SD card of 2GB (2.000 images) and built-in memory (200 images)
- Images saved as JPG files
- PC communication through USB 2.0 port
- Supplied by rechargeable batteries NiMH AA or alkaline batteries AA
- Battery operating time over 2 hours
- IP54 degree
- Weight of 0,73kg (battery included)
- Image analysis software IrAnalyser
- Accessories included: AC adapter, rechargeable batteries, MiniSD 4GB card, card reader, USB cable, analysis software, carrying bag and heavy duty case
- ISO9001 calibration certificate included

Article	Code	EAN 13	Characteristics
KPS-IR2	603550003	8435394725758	160x120 pixels, DUAL

INFRARED CAMERAS

• KPS-IR1 Infrared camera 160 x 120 pixels

- 160 x 120 pixels sensor
- Thermal sensitivity of 0,1ºC@30ºC
- Field of view of 20,6 x 15,5 °
- Motorized focusing of IR lens with electronic zoom 2x
- 4 colour palettes
- 3,6" high resolution TFT screen
- Measured temperature from -20ºC to 250ºC
- Accuracy of ±2ºC or ±2% of reading
- Movable temperature spot and automatic maximum temperature spot
- Temperature alarms
- Emissivity correction from 0,01 to 1
- Automatic temperature correction based on emissivity, distance, relative humidity, atmospheric transmission and external optics
- Area definition with maximum, minimum and average temperature determination (IrAnalyser)
- Isotherms definition (IrAnalyser)
- Images saved into SD card of 2GB (2.000 images)
- Images saved as JPG files
- PC communication through USB 2.0 port
- Supplied by rechargeable batteries NiMH AA or alkaline batteries AA
- Battery operating time over 2 hours
- IP54 degree
- Weight of 0,73kg (battery included)
- Image analysis software IrAnalyser
- Accessories included: AC adapter, rechargeable batteries, MiniSD 4GB card, card reader, USB cable, analysis software, carrying bag and heavy duty case
- ISO9001 calibration certificate included

Article	Code	EAN 13	Characteristics
KPS-IR1	603550002	8435394725741	160x120 pixels

• KPS-IR0 Infrared camera 160 x 120 pixels

- 160 x 120 pixels sensor
- Thermal sensitivity of 0,1ºC@30ºC
- Field of view of 20,6 x 15,5 °
- Motorized focusing of IR lens with electronic zoom 2x
- 4 colour palettes
- 3,6" high resolution TFT screen
- Measured temperature from 0ºC to 250ºC
- Accuracy of ±2ºC or ±2% of reading
- Movable temperature spot and automatic maximum temperature spot
- Temperature alarms
- Emissivity correction from 0,01 to 1
- Automatic temperature correction based on emissivity, distance, relative humidity, atmospheric transmission and external optics
- Area definition with maximum, minimum and average temperature determination (IrAnalyser)
- Isotherms definition (IrAnalyser)
- Images saved into SD card of 2GB (2.000 images)
- Images saved as JPG files
- PC communication through USB 2.0 port
- Supplied by rechargeable batteries NiMH AA or alkaline batteries AA
- Battery operating time over 2 hours
- IP43 degree
- Weight of 0,73kg (battery included)
- Image analysis software IrAnalyser
- Accessories included: AC adapter, rechargeable batteries, MiniSD 4GB card, card reader, USB cable, analysis software, carrying bag
- ISO9001 calibration certificate included

Article	Code	EAN 13	Characteristics
KPS-IR0	603550001	8435394725734	160x120 pixels

INFRARED CAMERAS

• KPS-IRB0 Infrared camera 80 x 80 pixels

- Intuitive interface easy to use.
- Affordable as basic diagnostic tool.
- Lithium battery high capacity 4 hours of continuous use.
- Backlit display LCD 3.5" without cropping the image, with high brightness to display the image without loss of information even outdoors or in bright light.
- Compact and robust design.
- Standard USB connection for charging and data transmission.
- Optional: WiFi connection to laptop or mobile phone.
- Measurement results by acoustic and beacons.
- Low battery indicator.

Characteristics:
- 80x80 detector
- 8 mm lens
- Field of View (FOV): 18.5°x18.5°
- Frame: 25Hz
- NETD: 80mk
- LCD Screen 320x240
- 3x digital zoom
- 4 color palettes
- Removable lithium battery with 4 hours of continuous use
- Charger included with the chamber
- Standard USB interface
- Temperature range: 0ºC a 250ºC
- Adjustable emissivity
- Measuring the temperature at a central point or area
- Maximum and minimum temperature fixed
- Optional accessories:
   - Quick charger
   - WiFi SD Card
   - Car Charger
- Protection level: IP43, against falls from 1m
- Operating temperature: 0ºC a 50ºC
- Dimensions: 103mm x 98mm x 258mm
- Weight: 755 g
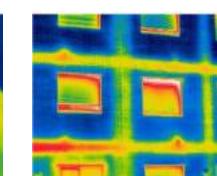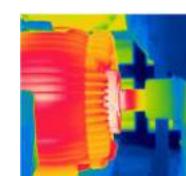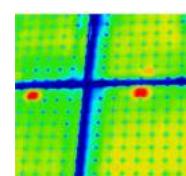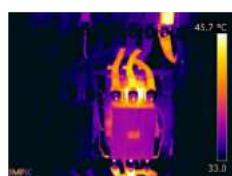
Article	Code	EAN 13	Characteristics
KPS-IRB0	603550006	8435394740157	320x240 pixels

INFRARED CAMERAS

•INFRARED CAMERAS SELECTION CHART

FUNCTIONS	KPS-IR9 CAMERA	KPS-IR4 CAMERA	KPS-IR2 CAMERA	KPS-IR1 CAMERA	KPS-IR0 CAMERA	KPS-IRB0 CAMERA
Code	603550005	603550004	603550003	603550002	603550001	603550006
Sensor	384 x 288	160 x 120	160 x 120	160 x 120	160 x 120	80 x 80
Field of view (FOV)	21,7º x 16,4º	20,6º x 15,5º	20,6º x 15,5º	20,6º x 15,5º	20,6º x 15,5º	18,5º x 18,5º
Sensibility	0,1ºC@30ºC	0,1ºC@30ºC	0,1ºC@30ºC	0,1ºC@30ºC	0,1ºC@30ºC	20mK
Accuracy	±2ºC or ±2% of lecture	±2ºC or ±2% of lecture	±2ºC or ±2% of lecture	±2ºC or ±2% of lecture	±2ºC or ±2% of lecture	±2ºC or ±2% of lecture
Focusing	Manual and automatic motorized	Manual and automatic motorized	Manual and automatic motorized	Manual and automatic motorized	Manual and automatic motorized	Manual
Electronic zoom	4X	2X	2X	2X	2X	3X
Temperature range	-20ºC to 250ºC	-20ºC to 250ºC	-20ºC to 250ºC	-20ºC to 250ºC	0ºC to +250ºC	0ºC to +250ºC
Screen	3,6" TFT	3,6" TFT	3,6" TFT	3,6" TFT	3,6" TFT	3,5" TFT
Dual	YES (2Mpx)	YES (2Mpx)	YES (2Mpx)	-	-	-
Color palettes	8	8	6	4	4	4
Cursors	Maximum temperature and scrollable on screen	Maximum temperature and scrollable on screen	Maximum temperature and scrollable on screen	Maximum temperature and scrollable on screen	Maximum temperature and scrollable on screen	Maximum and minimum temperature center point
Emissivity correction	From 0,01 to 1	From 0,01 to 1	From 0,01 to 1	From 0,01 to 1	From 0,01 to 1	From 0,01 to 1
Automatic temperature correction	YES	YES	YES	YES	YES	YES
Temperature alarms	YES	YES	YES	YES	YES	NO
Image Fusion	YES	YES (screen and software)	YES (screen and software)	-	-	-
Definition of areas of maximum, minimum, average temperature	YES (IRanalyser)	YES (IRanalyser)	YES (IRanalyser)	YES (IRanalyser)	YES (IRanalyser)	YES (IRanalyser)
Isotherms definition	YES (IRanalyser)	YES (IRanalyser)	YES (IRanalyser)	YES (IRanalyser)	YES (IRanalyser)	YES (IRanalyser)
Voice annotation	YES	YES	-	-	-	-
Video recording	YES	YES	-	-	-	-
Optional telephoto lenses	YES	YES	YES	YES	-	-
Optional wide-angle lens	YES	YES	YES	YES	-	-
Class II laser sighting	YES	YES	YES	-	-	-
Image storage	SD Card (up to 8GB) and internal memory	SD Card (up to 4GB) and internal memory	SD Card (up to 4GB) and internal memory	SD Card (up to 4GB)	SD Card (up to 4GB)	SD Card (up to 4GB)
Software analysis	IRAnalyser	IRAnalyser	IRAnalyser	IRAnalyser	IRAnalyser	IRAnalyser
Power supply	By rechargeable AA NiMH batteries or AA alkaline batteries	By rechargeable AA NiMH batteries or AA alkaline batteries	By rechargeable AA NiMH batteries or AA alkaline batteries	By rechargeable AA NiMH batteries or AA alkaline batteries	By rechargeable AA NiMH batteries or AA alkaline batteries	Lithium battery with 4 hours of continuous use
Degree of protection	IP54	IP54	IP54	IP54	IP43	IP43
Weight (included batteries)	1kg	0,73kg	0,73kg	0,73kg	0,73kg	0,75kg

DIGITAL CLAMP METERS

• KPS-PA70 Digital clamp meter TRMS

- Digital clamp meter with True RMS measurement
- In-rush current measurement
- 6.000 counts
- Resistance, frequency, duty cycle and capacitance measurement
- Diode check and continuity test
- Autoranging
- Relative measurements
- Data hold, maximum and minimum values
- Jaw size 40mm with work light
- Low battery display and AutoOFF
- Display backlight
- CAT.III 1000V and CAT.IV 600V under EN61010

Article	Code	EAN 13	Characteristics
KPS-PA70	602150001	8435394710099	1,000A AC/DC, 750VAC, 1000VDC. 60MΩ, 10kHz, 100μF

• KPS-PA60 Digital clamp meter TRMS

- Digital clamp meter with True RMS measurement
- 4.000 counts
- Resistance, frequency, duty cycle and capacitance
- Diode check and continuity test
- Autoranging
- Relative measurements
- Data hold
- Jaw size 40mm with work light
- Low battery display and AutoOFF
- Display backlight
- CAT.III 600V under EN61010

Article	Code	EAN 13	Characteristics
KPS-PA60	602150002	8435394710105	1,000A AC/DC, 600V AC/DC. 40MΩ, 10MHz, 4000μF

• KPS-PA40 Digital clamp meter

- Digital clamp meter with temperature measurement
- 4.000 counts
- Resistance, frequency, duty cycle and capacitance
- Diode check and continuity test
- Autoranging
- Relative measurements
- Data hold
- Jaw size 42mm
- Temperature measurement from -40ºC up to 750ºC
- CAT.III 600V under EN61010

Article	Code	EAN 13	Characteristics
KPS-PA40	602150003	8435394710112	1,000A AC/DC, 700VAC. 1000VDC 40MΩ, 100kHz, 40μF

DIGITAL CLAMP METERS

• KPS-PA30 Digital clamp meter

- Digital clamp meter
- 6000 counts
- Resistance, frequency, duty cycle and capacitance
- Diode check and continuity test
- Autoranging
- Data hold, maximum and minimum values
- Jaw size 40mm with work light
- Low battery display and AutoOFF
- Display backlight
- CAT. III 600v under EN 61010.

Article	Code	EAN 13	Characteristics
KPS-PA30	602150005	8435394710136	1,000A AC, 600V AC/DC. 60MΩ, 10MHz, 4000μF

• KPS-PA10 Digital clamp meter

- Digital clamp meter
- 2000 counts
- Resistance measurement
- Diode check and continuity test
- Data hold
- Jaw size 42mm
- Display backlight
- CAT. III 600v under EN 61010.

Article	Code	EAN 13	Characteristics
KPS-PA10	602150006	8435394710143	1,000A AC, 750VAC. 1000VDC, 2MΩ

• KPS-PA50 MINI Digital AC/DC clamp meter

- Small size digital clamp meter with True RMS measurement
- In-rush current measurement 600 A
- 6600 counts
- Resistance, frequency, duty cycle and capacitance measurement
- Jaw size 26mm with work light
- Autoranging
- Diode check and continuity test
- Data hold
- Maximum and minimum values
- Low battery display and AutoOFF
- Display backlight
- CAT.III 600V under EN61010

Article	Code	EAN 13	Characteristics
KPS-PA50 MINI	602150018	8435394710167	600A AC/DC, 600V AC/DC. 66MΩ, 1kHz, 66mF

DIGITAL CLAMP METERS

• KPS-PA05 Digital clamp meter

- Digital clamp meter
- Current measurement: 1.000A AC
- Voltage measurement: 1000V DC / 750V AC
- 2000 counts
- Resistance measurement
- Continuity test
- Data hold
- CAT. II 1000V, CAT. III 600V under EN 61010

Article	Code	EAN 13	Characteristics
KPS-PA05	602150022	8435394742656	1.000A AC, 750V AC, 1000V DC, 2MΩ

• KPS-PA04 MA Digital clamp meter

- Digital clamp meter
- 4000 counts
- Current measurement: 200A AC
- Voltage measurement: 700V AC / 1.000V DC
- Resistance, frequency and capacitance measurement
- Diode check and continuity test
- Autoranging, backlight display
- Data hold. Auto POWER OFF.
- CAT. III 600V under EN 61010

Article	Code	EAN 13	Characteristics
KPS-PA04 MA	602150024	8435394742670	200A AC, 700VAC, 1.000VDC, 40MΩ, 100kHz, 40μF

• KPS-PA2000 Digital clamp meter

- Digital clamp meter
- Current measurement: 2.000A AC
- Voltage measurement: 1000V DC / 750V AC
- 2000 counts
- Resistance, frequency and temperature measurement
- Diode check and continuity test
- Autoranging, backlight display
- CAT. II 1000V under EN 61010

Article	Code	EAN 13	Characteristics
KPS-PA2000	602150023	8435394742663	1.000V DC, 750V AC, 2.000A AC, 2MΩ, 750°C, 20kHz

DIGITAL CLAMP METERS

• KPS-PA20 MINI Digital AC clamp meter

- Mini Digital AC clamp meter
- Resistance, frequency, duty cycle and capacitance measurement
- Temperature measurement from -20ºC up to 750ºC
- Jaw size: 26mm with work light
- Autoranging
- Diode check and continuity test
- Data hold and maximum value
- Autopower OFF
- Display backlight
- CAT.III 600V under EN61010

Article	Code	EAN 13	Characteristics
KPS-PA20 MINI	602150017	8435394710150	600A AC, 600VAC, 600VDC. 40MΩ, 100kHz, 100μF

• KPS-PF50 AC leakage clamp meter

- Autoranging
- Ranges: 40mA/400mA/4 A/ 40 A/ 400 A/600 A
- 4000 counts
- Minimum resolution of 0,01mA
- Low pass filter function, block frequency of 1kHz
- Resistance, frequency, duty cycle and capacitance measurement
- Temperature measurement from -20ºC up to 1.000ºC
- Relative measurements
- Diode check and continuity test
- Data hold
- Low battery display and AutoOFF
- Display backlight
- CAT.III 600V under EN61010

Article	Code	EAN 13	Characteristics
KPS-PF50	602150019	8435394710174	600A AC, 600V AC/DC. 40MΩ, 2kHz, 100μF

• KPS-PF10 AC leakage clamp meter

- High sensitivity AC leakage clamp meter
- Ranges : 2mA/20mA/60A
- Minimum resolution of 0,001mA
- Data hold
- Jaw size 31mm
- Low battery display
- 2000 counts
- CAT.III 600V under EN61010

Article	Code	EAN 13	Characteristics
KPS-PF10	602150020	8435394710181	60A AC/DC

DIGITAL CLAMP METERS

• DIGITAL CLAMP METERS SELECTION CHART
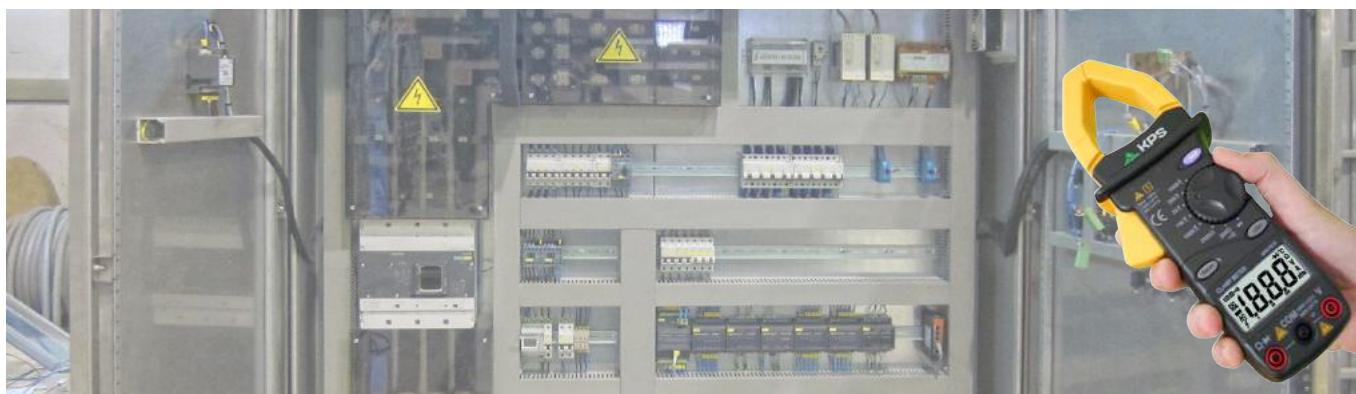
FUNCTIONS	KPS-PA70 DIGITAL CLAMP METER	KPS-PA60 DIGITAL CLAMP METER	KPS-PA40 DIGITAL CLAMP METER	KPS-PA30 DIGITAL CLAMP METER	KPS-PA10 DIGITAL CLAMP METER
KPS article code	602150001	602150002	602150003	602150005	602150006
Altern current, up to	1000A	1000A	1000A	1000A	1000A
Direct current, up to	1000A	1000A	1000A	-	-
Altern voltage, up to	750V	600V	700V	600V	750V
Direct voltage, up to	1000V	600V	1000V	600V	1000V
Counts	6000	4000	4000	6000	2000
Resistance, up to	60MΩ	40MΩ	40MΩ	60MΩ	2MΩ
Frequency, up to	10kHz	10MHz	100kHz	10MHz	-
Temperature, up to	-	-	750ºC	-	-
Continuity test	YES	YES	YES	YES	YES
Diode check	YES	YES	YES	YES	YES
Capacity, up to	100mF	4000μF	40μF	4000μF	-
Non-contact voltage detection	YES	-	-	-	-
Inrush current	YES	-	-	-	-
Leakage current with harmonic filter	-	-	-	-	-
True RMS measurement	YES	YES	-	-	-
Data hold	YES	YES	YES	YES	YES
Relative measurements	YES	YES	YES		YES
Maximum/minimum values	YES	-	-	YES	-
Autoranging	YES	YES	YES	YES	-
Jaw size	40mm with lighting	40mm with lighting	42mm	40mm with lighting	42mm
AutoOFF	YES	YES	-	YES	-
Backlight display	YES	YES	-	YES	YES
Low battery display	YES	YES	-	YES	-
Category under EN61010	CAT. III 1000V CAT. IV 600V	CAT.III 600V	CAT. II 1000V CAT. III 600V	CAT. III 600V	CAT. II 1000V CAT. III 600V

DIGITAL CLAMP METERS

• DIGITAL CLAMP METERS SELECTION CHART

FUNCTIONS	KPS-PA05 DIGITAL AC CLAMP METER	KPS-PA04 MA DIGITAL AC CLAMP METER	KPS-PA2000 DIGITAL AC CLAMP METER	KPS-PA20 MINI DIGITAL AC CLAMP METER	KPS-PA50 MINI DIGITAL AC/DC CLAMP METER	KPS-PF10 AC LEAKAGE CLAMP METER	KPS-PF50 AC LEAKAGE CLAMP METER
KPS article code	602150022	602150024	602150023	602150017	602150018	602150020	602150019
Altern current, up to	1.000A	200A	2.000A	600A	600A	60A	600A
Direct current, up to	-	-	-	-	600A	-	-
Altern voltage, up to	1.000V	700V	1.000V	600V	600V	-	600V
Direct voltage, up to	750V	1.000V	750V	600V	600V	-	600V
Counts	2000	4000	2000	4000	6600	2000	2000
Resistance, up to	2MΩ	40MΩ	2MΩ	40MΩ	66MΩ	-	40MΩ
Frequency, up to	-	100Hz	20kHz	100kHz	1kHz	-	2kHz
Temperature, up to	-	-	750ºC	750ºC	750ºC	-	1000ºC
Continuity test	YES	YES	YES	YES	YES	-	-
Diode check	-	YES	YES	YES	YES	-	YES
Capacity, up to	-	40µF	-	100µF	66mF	-	100µF
Non-contact voltage detection	-	-	-	-	-	-	-
Inrush current	-	-	-	-	YES	-	-
Leakage current with harmonic filter	-	-	-	-	-	YES	-
True RMS measurement	-	-	-	-	YES	-	-
Data hold	YES	YES	YES	YES	YES	YES	YES
Relative measurements	-	YES	-	-	YES	-	YES
Maximum/minimum values	-	-	-	-	-	-	-
Autoranging	-	YES	-	YES	YES	-	-
Jaw size	50 mm	12 mm	55 mm	26mm with lighting	26mm with lighting	31mm	31mm
AutoOFF	-	YES	-	YES	YES	-	YES
Backlight display	-	YES	YES	YES	YES	-	YES
Low battery display	YES	YES	YES	-	YES	YES	YES
Category under EN61010	CAT.II 1.000V CAT.III 600V	CAT.III 600V	CAT. II 1.000V	CAT.III 600V	CAT. III 600V	CAT. III 600V	CAT. III 600V

KPS

DIGITAL MULTIMETERS

• KPS-MT60 True RMS Multimeter

- Digital multimeter with True RMS measurement
- USB interface and Analysis software
- 6600 counts
- Resistance, frequency, duty cycle and capacitance measurement
- Diode check and continuity test
- Non-contact voltage detection
- Relative measurements
- Data hold, maximum and minimum values
- Autoranging
- Low battery display and AutoOFF
- Display backlight
- CAT. IV 600v under EN61010.

Article	Code	EAN 13	Characteristics
KPS-MT60	602250001	8435394710198	660V AC/DC, 10AAC7DC, 66MΩ, 66MHz, 66µF

• KPS-MT50 Multimeter

- Temperature measurement from -20ºC up to 1.000ºC
- 4000 counts
- Resistance, frequency, duty cycle and capacitance measurement
- Transistor (hFE) check
- Diode check and continuity test
- Non-contact voltage detection
- Relative measurements
- Data hold, maximum and minimum values
- Autoranging
- Display backlight
- CAT. III 1000v under EN61010.

Article	Code	EAN 13	Characteristics
KPS-MT50	602250002	8435394710204	750VAC, 1000VDC, 10A AC/DC, 40MΩ, 10MHz, 4000µF, -20ºC a 1000ºC

• KPS-MT40 Multimeter

- Digital multimeter
- 2000 counts
- Resistance, frequency and capacitance measurement
- Transistor check
- Diode check and continuity test
- Data hold
- Low battery display and AutoOFF
- CAT. II 1000v under EN61010

Article	Code	EAN 13	Characteristics
KPS-MT40	602250003	8435394710211	750VCA, 1000VDC, 10A AC/DC, 200MΩ, 20kHz, 100µF

DIGITAL MULTIMETERS

• KPS-MT30 Multimeter

- Digital multimeter
- 2000 counts
- Resistance measurement
- Diode check and continuity test
- Data hold
- CAT. II 600v under EN61010

Article	Code	EAN 13	Characteristics
KPS-MT30	602250004	8435394710228	600V AC/DC, 10ADC. 2MΩ

• KPS-MT10 Pocket size digital multimeter

- Pocket size digital multimeter
- 4000 counts
- Resistance, frequency and capacitance measurement
- Diode check and continuity test
- Data hold
- Autoranging
- AutoOFF
- CAT. II 600v under EN61010.

Article	Code	EAN 13	Characteristics
KPS-MT10	602250005	8435394710235	600V AC/DC, 400mA AC/DC. 40MΩ, 100kHz, 100μF

• KPS-MT20L Pen-type digital multimeter

- Pen-type digital multimeter
- Non-contact voltage detection with light signalling
- Continuity test
- Retractable tip design
- 2000 counts
- Resistance measurement
- Diode check
- Data hold, maximum value
- Autoranging
- AutoOFF
- CAT.II 600v under EN61010.

Article	Code	EAN 13	Characteristics
KPS-MT20L	602350006	8435394710297	600V AC/DC, 20MΩ,

DIGITAL MULTIMETERS

• DIGITAL MULTIMETER SELECTION CHART

FUNCTIONS	KPS-MT60 MULTIMETER	KPS-MT50 MULTIMETER	KPS-MT40 MULTIMETER	KPS-MT30 MULTIMETER	KPS-MT10 POCKET SIZE MULTIMETER	KPS-MT20L PEN-TYPE MULTIMETER
KPS article number	602250001	602250002	602250003	602250004	602250005	602350006
Altern voltage, up to	660V	750V	750V	600V	600V	600V
Direct voltage, up to	660V	1000V	1000V	600V	600V	600V
Altern current, up to	10A	10A	10A		400mA	-
Direct current, up to	10A	10A	10A	10A	400mA	-
Counts	6600	4000	2000	2000	4000	2000
Resistance, up to	66MΩ	40MΩ	200MΩ	2MΩ	40MΩ	20MΩ
Frequency, up to	66MHz	10MHz	20kHz	-	100kHz	-
Temperature, up to	-	1000ºC	-	-	-	-
Capacity, up to	66mF	4000µF	100µF	-	100µF	-
Continuity test	SI	SI	SI	SI	SI	SI
Transistor check	-	SI	SI	-	-	-
Diode check	SI	SI	SI	SI	SI	SI
Non-contact voltage detection True RMS measurement	SI	SI	-	-	-	SI
True RMS measurement	SI	-	-	-	-	-
Data hold	SI	SI	SI	SI	SI	SI
Relative measurements	SI	SI	-	-	-	-
Maximum/minimum values	SI	SI	-	-	-	MAX
Autoranging	SI	SI	-	-	SI	SI
AutoOFF	SI	-	SI	-	SI	SI
Backlight display	SI	SI	-	-	-	-
Low battery display	SI	-	SI	-	-	-
PC connectivity	SI	-	-	-	-	-
Category under EN61010	CAT. IV 600V	CAT. IV 600V	CAT. II 1000V CAT. III 600V	CAT. II 600V	CAT. II 600V	CAT. II 600V

TEST LEADS

• Test leads

Article	Code	EAN 13	Characteristics
KPS-PT30	602990041	8435394710433	Test leads with aligator clips
KPS-PT20	602990042	8435394710440	Test leads CAT.IV large size
KPS-PT10	602990043	8435394710457	Test leads CAT.II small size

KPS - PT30

KPS - PT20

KPS - PT10

VOLTAGE AND CONTINUITY DETECTORS

• KPS-DT30 Voltage detector

- Voltage and continuity detector.
- AC and DC Voltage detector: 12V, 50V, 120V, 230V, 400V, 690V
- Led indication
- Continuity tester (<20kΩ)
- Voltage polar indication (AC/DC)
- RCD testing
- Automatic detection of live and neutral
- Battery supplied

Article	Code	EAN 13	Characteristics
KPS-DT30	602350009	8435394710327	Voltage and continuity detector, diferencials test

• KPS-DT20 Voltage detector

- Voltage and continuity detector.
- AC and DC voltage detection: 6V, 12V, 24V, 50V, 110V, 220V, 380V
- LED indication
- DC Voltage polar indication
- Battery supplied

Article	Code	EAN 13	Characteristics
KPS-DT20	602350004	8435394710273	Voltage and continuity detector

• KPS-DT10 Voltage detector

- Non-Contact voltage detector.
- 100V to 240VAC
- Sound and light indication
- Pocket size
- Battery supplied, 2 x 1,5V AAA
- CAT.III 600v under EN61010

Article	Code	EAN 13	Characteristics
KPS-DT10	602350008	8435394710310	Non-contact voltage detector

HIGH VOLTAGE DETECTION POLES

• High voltage detection poles

- High voltage detection on electric lines.
- Acoustic indication of high voltage (sonido intermitente de 50dB a 3m)
- Visual indication of high voltage (flashing red light)
- Voltage detector with adjustable angle
- Telescopic, compact and lightweight
- Minimum voltage detection of 2.7 kV
- Operating temperature: from -10ºC to 50ºC
- Protected against water
- Battery powered (2xLR44 1,5V)
- According to EN61243-1 and EN60068-2-6, 14, 32
- Include carrying bag

Article	Code	EAN 13	Minimum voltage	Folded lenght	Extracted lenght	Weight
KPS-PAT230	603600001	8435394728759	36,5kV (LAT1)	89cm.	152cm.	485gr.
KPS-PAT290	603600002	8435394728766	81,5kV (LAT2)	137cm.	245cm.	590gr.

RESISTANCE AND INSULATION METERS

• KPS-TL10 Digital earth resistance tester

- Digital earth resistance tester
- Earth resistance and voltage measurement, three wire connection
- 2000 counts
- Data hold
- Low battery indication
- Auto power OFF
- Two auxiliary rods, three leads and heavy-duty case included

Article	Code	EAN 13	Characteristics
KPS-TL10	602350001	8435394710242	Resistance: 10Ω / 100Ω / 1000Ω Voltage measurement: 0-30 VAC

• KPS-TL20 Digital earth resistance tester

- Microprocessor controlled.
- Measure earth resistance in three ranges: 40Ω/400Ω/4kΩ.
- Capable of measuring earth voltage: 0~400Vac.
- 4000 counts.
- LCD backlight display.
- 2mA measuring current permits the testing of earth resistance without tripping earth leakage current circuit breakers in the circuit.
- Data hold and relative functions.
- Auto power off function and low battery indication
- Small and light weight, easy to use.

Article	Code	EAN 13	Characteristics
KPS-TL20	602350010	8435394732787	Resistance: 40Ω / 400Ω / 4kΩ Voltage measurement: 0-30 VAC

• KPS-TL40 / KPS-TL45 Digital earth resistance tester

- 3 methods of test for measuring the earth resistance: 2, 3 and 4 wires
- Measuring of the ground resistivity
- Microprocessor controlled, ensuring high performance, accuracy and reliability
- Automatic check C spike (current) and P spike (potential)
- Autoscale function, data hold and auto power+
- Store up to 200 measurements in memory and can be displayed on screen
- USB-RS232 optical cable for data transmission and connection to PC (KPS-TL45)
- Safety standards: EN 61010-1 CAT.IV 300V, EN 61326-1, EN 61557-1, EN 61557-5

Article	Code	EAN 13	Characteristics
KPS-TL40	602350016	8435394740874	Earth voltage: 0-300VAC Resistance: 20Ω / 200Ω / 2.000Ω
KPS-TL45	602350017	8435394740881	

RESISTANCE AND INSULATION METERS

• KPS-MA20 Insulation tester

- Insulation resistance tester
- Single or continuous measurement with auto power OFF after five minutes
- AC voltage measurement up to 600VAC
- 2000 counts
- Continuity test (<200Ω)
- Low battery indication
- Autopower OFF
- Test leads, heavy-duty case, batteries included

Article	Code	EAN 13	Characteristics
KPS-MA20	602350003	8435394710266	Resistance: 20MΩ / 200MΩ / 2000MΩ Test voltages: 250V/500V/1000VDC Voltage measurement: until 600VAC Continuity test : <200Ω

• KPS-MA30 Insulation tester

- Microprocessor controlled.
- 1mA test current on insulation test at nominal voltage.
- Test Voltage (DCV): 250/500/1000V.
- Short circuit current: >200mA.
- Buzzer sounds: Below 10Ω.
- Continuity Buzzer and Autoranging.
- Auto power off, auto Data hold and relative functions.
- External voltage warning.
- Automatic circuit discharge.

Article	Code	EAN 13	Characteristics
KPS-MA30	602350011	8435394732794	Test voltages: 250V/500V/1000VDC Voltage measurement: until 600VAC Short circuit current: >200Ω

• KPS-MA10 Insulation tester

- Insulation tester
- Insulation test voltages: 250V/500V/1.000VDC
- Measuring ranges: 200MΩ/2.000MΩ
- External voltages warning indication
- Automatic circuit discharge
- AC voltage measurement up to 600VAC
- Continuity test (<20Ω, <2kΩ)
- 2000 counts
- Low battery indication
- Autopower OFF
- Test leads, heavy-duty case, shoulder belt and batteries included.

Article	Code	EAN 13	Characteristics
KPS-MA10	602350002	8435394710259	Resistance: 200MΩ / 2000MΩ Test voltages: 250V/500V/1000VDC Voltage measurement: hasta 600VAC Continuity test <20Ω, <2kΩ

RESISTANCE AND INSULATION METERS

• KPS-MA10HV Insulation resistance meter up to 5kV

- Insulation resistance meter with autoscale.
- Four test voltages.
- Bar graph shows the evolution of the voltage during the test.
- Overload protection.
- Visual and acoustic indication of external voltage.
- Accuracy al 5%.
- Low battery consumption and Auto Off.
- Compact and lightweight.
- According to the standards EN 61010-1, EN 61326-1.

Article	Code	EAN 13	Characteristics
KPS-MA10HV	602350014	8435394740461	Test voltages: 500V DC, 1kV DC, 2.5kV DC, 5kV DC Measures: 25GΩ, 50GΩ, 125GΩ, 250GΩ

• KPS-MA20HV Insulation resistance meter up to 10kV

- Insulation resistance meter with autoscale.
- Four test voltages.
- Bar graph shows the evolution of the voltage during the test.
- Overload protection.
- Visual and acoustic indication of external voltage.
- Accuracy al 5%.
- Low battery consumption and Auto Off.
- Compact and lightweight.
- According to the standards EN 61010-1, EN 61326-1.

Article	Code	EAN 13	Characteristics
KPS-MA20HV	602350015	8435394740478	Test voltages: 1kV DC, 2.5kV DC, 5kV DC, 10kV DC Measures: 50GΩ, 125GΩ, 250GΩ, 500GΩ

• KPS-MA30HV Insulation resistance meter up to 15kV

- Insulation tester up to 15 kV DC.
- Test voltage adjustable in steps of 500 V.
- Measurement scale up to 2TΩ.
- PI and DAR index calculation.
- Automatic measurement scale.
- Visual and acoustic indication of external voltage.

Article	Code	EAN 13	Characteristics
KPS-MA30HV	602350012	8435394740317	DC voltage up to 15kV, 2TΩ measuring scale

ENVIRONMENTAL METERS

• KPS-TM10 Non-contact Infrared thermometer

- Non-contact infrared thermometer
- Laser target pointer
- Distance to spot 12:1
- Temperature range from -20ºC up to 537ºC.
- Emissivity of 0,95
- ºC/ºF Selection
- Max, min and average values
- Data hold and display back light
- Low battery indication and auto power OFF

Article	Code	EAN 13	Characteristics
KPS-TM10	602450001	8435394710334	Scale: -20ºC a 50ºC, 51ºC a 537ºC. Accuracy: ± 2,5ºC

• KPS-TH10 Temperature and humidity meter

- Ambient temperature (ºC/ºF) and relative humidity measurement
- Wet bulb and dew point
- Update rate of 400ms
- Maximum and minimum values
- Data hold
- Data logging up to 100 groups
- Display backlight

Article	Code	EAN 13	Characteristics
KPS-TH10	602350007	8435394710396	Ambient temperature and relative humidity measurement

• KPS-LX10 Digital light meter

- Digital light meter for illuminance measurement (LUX)
- Measuring ranges: 2000 Lux, 20000 Lux, 50000 Lux
- 2000 counts
- Lux probe connected to equipment through extensible cable
- Data hold and low battery indicator

Article	Code	EAN 13	Characteristics
KPS-LX10	602450002	8435394710341	Scales: 2000 Lux, 20000 Lux, 50000 Lux

• KPS-LX30LED Digital light meter

- High accuracy digital light meter
- Data hold function
- Fc/Lux/CD unit selection
- Switch between different lighting sources.
- Measure of all kind of lamps, including LED lamps
- Low battery indication and autopower OFF
- 2000 counts
- Compact, durable and portable design

Article	Code	EAN 13	Characteristics
KPS-LX30LED	602450011	8435394739267	Measurement ranges: 0.00 ~ 200000 Lux

ENVIRONMENTAL METERS

• KPS-SN10 Digital sound level meter

- Class II under IEC 651
- Measuring range: 30dB up to 130dB
- Accuracy: ±2dB
- 2.000 counts
- Resolution: 0,1dB
- Large digital LCD display with bar graph
- Frequency range: 30Hz up to 8kHz
- Sample rate: 2 times per second
- Overrange indication
- Data hold, maximum and minimum values
- A/C weighting selection
- FAST/SLOW selection
- Autopower OFF and low battery indication
- Display backlight

Article	Code	EAN 13	Characteristics
KPS-SN10	602450004	8435394710365	Type II, 30 to 130 dB

• KPS-AN10 Anemometer

- Anemometer with bar graph
- Measurement of air velocity and air flow in different units
- Air velocity: m/sc, f/min, km/h, miles/h, knots
- Air flow: cf/min, m3/min, m3/sc
- Accuracy of ±3%
- Flow area setting
- Data hold, maximum and minimum values
- Autopower OFF and low battery indication
- Display backlight

Article	Code	EAN 13	Characteristics
KPS-LX20	602450005	8435394710372	Mesurement of air speed and air flow in different units

•KPS-MF50 5 in 1 environmental tester

- 5 in 1 environmental tester
- ºC or ºF Selection
- Relative humidity measurement
- Light measurement with correction filter
- Air velocity (m/sc, km/h, feet/sc)
- Air flow (cf/min, m3/min)
- Sound level measurement class II under IEC 61672, using A/C weighting and FAST/SLOW sample rating modes
- Large dual LCD simultaneous display of real-time value and MAX/MIN/AVG/DIF(MAX-MIN) value
- Autoranging
- Over range indication
- Autopower OFF and low battery indication
- Tripod mount included

Article	Code	EAN 13	Characteristics
KPS-MF50	602450006	8435394710389	Temperature, humidity, light, speed, flow

INDUSTRIAL MEASUREMENT EQUIPMENT

• KPS-CF20 Phase and motor rotation tester

- Phase sequence indication
- Motor rotation indication
- Open phase indication
- Sound and light indication
- Low battery display
- Large size alligator clips included

Article	Code	EAN 13	Characteristics
KPS-CF20	602350007	8435394710303	Phase sequence, motor connexion, opened phases

• KPS-CF10 Phase tester

- Phase sequence indication
- Open phase indication
- Sound and light indication
- Low battery display

Article	Code	EAN 13	Characteristics
KPS-CF10	602350005	8435394710280	Phase sequence, opened phases

• KPS-TC10 Digital tachometer with contact

- Measurement of angular velocity from 50 to 20.000 RPM
- Measurement of lineal velocity: m/min, m/sc, feet/min, feet/sc, inch/ min
- Data hold
- Maximum, minimum and average values
- Data logging up to 100 groups
- Autopower OFF and low battery indication
- Display back light

Article	Code	EAN 13	Characteristics
KPS-TC10	602450008	8435394710402	Angular speed from 50 to 20000 rev/min

• KPS-TC20 Digital tachometer without contact

- Measurement of angular velocity from 50 to 100.000 RPM
- Measurement distance: 50 to 250mm
- Data hold
- Maximum, minimum and average values
- Data logging up to 100 groups
- Autopower OFF and low battery indication
- Display back light

Article	Code	EAN 13	Characteristics
KPS-TC20	602450009	8435394710419	Angular speed from 50 to 100000 rev/min

• KPS-CP10 Digital voltage/mA calibrator

- Digital voltage/mA calibrator
- Measures and generates voltage signals of up to 10VDC
- Measures and generates current signals of up to 24mA DC
- Selection of absolute or percentage value in measuring and generation of current
- Calibration and simulation of external transductors
- LOOP mode with measurement range of 24VDC
- Voltage ranges:
  - 0-100mV. Resolution of 0,01mV
  - 0-10V. Resolution of 1mV
- Current range 0-24mA. Resolution of 1mA
- Supplied in metallic case

Article	Code	EAN 13	Characteristics
KPS-CP10	602450010	8435394710426	Measures and generates voltage and current signals

NOTES

NOTES

KPS

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KPS

KPS

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