

1. ELECTRICAL SPECIFICATIONS

Accuracy is calculated as \pm [% readings + (no. of digits*resolution)] at 23 °C \pm 5 °C, relative humidity <80%RH

SAFETY TEST

DMM – DC Voltage

| Range [V] | Resolution [V] | Accuracy |
|-----------|----------------|------------------------|
| 3 ÷ 1500 | 1 | \pm (1.0%rdg + 2dgt) |

DMM – AC TRMS Voltage

| Range [V] | Resolution [V] | Accuracy |
|-----------|----------------|------------------------|
| 3 ÷ 1000 | 1 | \pm (1.0%rdg + 3dgt) |

Frequency range: 42.5Hz ÷ 69Hz ; Voltage zeroed for measured values <3V

Insulation Resistance (M Ω) – DUAL Mode

| Test voltage DC [V] | Range [M Ω] | Resolution [M Ω] | Accuracy (*) |
|----------------------|---------------------|--------------------------|----------------------|
| 250, 500, 1000, 1500 | 0.1 ÷ 0.99 | 0.01 | \pm (5%rdg + 5dgt) |
| | 1.0 ÷ 19.9 | 0.1 | |
| | 20 ÷ 100 | 1 | |

(*) Accuracy indicatec for VPN \geq 240V, R_{fault} \geq 10 Ω . Accuracy of R_p and R(+) not declared if R(+) \geq 0.2M Ω and R(-) <0.2M Ω
Accuracy of R_p and R(-) not declared if R(+) < 0.2M Ω and R(-) \geq 0.2M Ω

Open voltage <1.25 x nominal test voltage
Short circuit current <15mA (peak) for each test voltage
Nominal measured current >1mA on R = 1k Ω x V_{nom} (with VPN, VPE, VNE= 0)

Insulation Resistance (M Ω) –TMR Mode

| Test voltage DC [V] | Range [M Ω] | Resolution [M Ω] | Accuracy |
|----------------------|---------------------|--------------------------|-----------------------|
| 250, 500, 1000, 1500 | 0.01 ÷ 9.99 | 0.01 | \pm (5.0%rdg+ 5dgt) |
| | 10.0 ÷ 99.9 | 0.1 | |

Open voltage <1.25 x nominal test voltage
Short circuit current <15mA (peak) for each test voltage
Nominal measured current >1mA on R = 1k Ω x V_{nom} (with VPN, VPE, VNE= 0)
Setting timer: 3s ÷ 999s

Continuity of protection conductors (RPE)

| Range [Ω] | Resolution [Ω] | Accuracy |
|--------------------|-------------------------|----------------------|
| 0.00 ÷ 9.99 | 0.01 | \pm (2%rdg + 2dgt) |
| 10.0 ÷ 99.9 | 0.1 | |
| 100 ÷ 1999 | 1 | |

Test current: >200mA DC up to 5 Ω (included cables), Resolution 1mA, Accuracy \pm (5.0%rdg + 5dgt)
Open voltage 4 < V_o < 10V

GFL (Ground Fault Locator) function

| Test voltage DC [V] | Range [M Ω] | Resolution [M Ω] | Accuracy (*) | Position accuracy |
|----------------------|---------------------|--------------------------|----------------------|-------------------|
| 250, 500, 1000, 1500 | 0.1 ÷ 0.99 | 0.01 | \pm (5%rdg + 5dgt) | \pm 1module |
| | 1.0 ÷ 19.9 | 0.1 | | |
| | 20 ÷ 100 | 1 | | |

(*) Accuracy indicatec for VPN \geq 240V, R_{fault} \geq 10 Ω . Accuracy of R_p and R(+) not declared if R(+) \geq 0.2M Ω and R(-) <0.2M Ω
Accuracy of R_p and R(-) not declared if R(+) < 0.2M Ω and R(-) \geq 0.2M Ω

Open voltage <1.25 x nominal test voltage
Short circuit current <15mA (peak) for each test voltage
Nominal measured current >1mA on R = 1k Ω x V_{nom} (with VPN, VPE, VNE= 0)
Set limit threshold on measure 0.05M Ω , 0.1M Ω , 0.23M Ω ; Number of set modules: 4 ÷ 35

The GFL function allows obtaining correct results with the following conditions:

- > Test carried out with V_{test} \geq V_{nom} on a single string disconnected from the inverter, from possible arresters and from earth connections
- > Test performed upstream of any blocking diodes
- > **Single fault** of low insulation located at any position in the string
- > Insulation resistance of the single fault <0.23M Ω
- > Environmental conditions similar to those in which the fault was reported





FUNCTIONALITY TEST (IVCK)

DC Voltage @ OPC

| Range [V] | Resolution [V] | Accuracy |
|--------------|----------------|----------------------|
| 3.0 ÷ 1500.0 | 0.1 | $\pm(1.0\%rdg+2dgt)$ |

Minimum VPN voltage to start the test: 15V

IDC Current @ OPC

| Range [A] | Resolution [A] | Accuracy |
|--------------|----------------|----------------------|
| 0.10 ÷ 40.00 | 0.01 | $\pm(1.0\%rdg+2dgt)$ |

DC Voltage @ STC

| Range [V] | Resolution [V] | Accuracy |
|--------------|----------------|----------------------|
| 3.0 ÷ 1500.0 | 0.1 | $\pm(4.0\%rdg+2dgt)$ |

IDC Current @ STC

| Range [A] | Resolution [A] | Accuracy |
|--------------|----------------|----------------------|
| 0.10 ÷ 40.00 | 0.01 | $\pm(4.0\%rdg+2dgt)$ |





2. GENERAL SPECIFICATIONS

DISPLAY AND MEMORY

| | |
|-----------------------------------|--------------------------------------|
| Features: | 240x240pxl custom LCD with backlight |
| Memory: | max 999 test |
| Internal database for PV modules: | max 64 saving modules |

POWER SUPPLY

| | |
|------------------------------|---|
| Internal power supply: | 6x1.5V alkaline batteries type LR6, AA or 6x1.2V rechargeable NiMH batteries type LR6, AA (External adapter needed for NiMH batteries recharging) |
| Battery life (@Temp = 20°C): | RPE: >500 Test (RPE \geq 0.1 Ω) GFL, M Ω : >500 test (Riso \geq 1k Ω xVTest) IVCK: >500 test (no SOLAR03) |
| Auto Power OFF: | after 5 minutes of idleness |

OUTPUT INTERFACE

| | |
|-------------------------|---|
| PC communication port: | optical/USB and WiFi |
| Interface with SOLAR03: | Bluetooth BLE communication (max distance 100m) |

MECHANICAL FEATURES

| | |
|------------------------------|------------------|
| Dimensions (L x W x H): | 235 x 165 x 75mm |
| Weight (batteries included): | 1.2kg |
| Mechanical protection: | IP40 |

ENVIRONMENTAL CONDITIONS

| | |
|------------------------|-------------------------------|
| Reference temperature: | 23°C \pm 5°C |
| Working temperature: | -10°C \div 50°C |
| Working humidity: | <80%RH (without condensation) |
| Storage temperature: | -10°C \div 60°C |
| Storage humidity: | <80%RH (without condensation) |
| Max height of use: | 2000m |

REFERENCE GUIDELINES

| | |
|------------------------------------|---|
| Safety: | IEC/EN61010-1, IEC/EN61557-1 |
| EMC: | IEC/EN61326-1 |
| Safety of measurement accessories: | IEC/EN61010-031 |
| IVCK measurements: | IEC/EN62446-1 |
| M Ω measurement: | IEC/EN61557-2 |
| RPE measurement: | IEC/EN61557-4 |
| Insulation: | double insulation |
| Pollution degree: | 2 |
| Overvoltage category: | CAT III 1000VAC, CAT III 1500VDC to ground Max 1000VAC, 1500VDC between inputs |

This instrument complies with the requirements of the European Low Voltage Directives 2014/35/EU (LVD), EMC directive 2014/30/EU and RED 2014/53/EU directive
This instrument satisfies the requirements of 2011/65/EU (RoHS) directive and 2012/19/EU (WEEE) directive



Diensten van EURO-INDEX

EURO-INDEX is fabrikant, importeur en distributeur van diverse A-merken op het gebied van test- en meetinstrumenten. Daarnaast leveren wij een groot aantal diensten om het gebruik van deze instrumenten in uw bedrijfsvoering te optimaliseren. Dit omvat uiteraard onderhoud, reparatie en kalibratie van de instrumenten, maar ook kennisdeling via de EURO-INDEX Academy en verhuur van instrumenten.

Geautoriseerd Service Centrum

EURO-INDEX b.v. is van alle vertegenwoordigde merken een Geautoriseerd Service Centrum. Dit betekent dat uw instrumenten worden behandeld door technici die zijn opgeleid door de fabrikant en beschikken over de juiste gereedschappen en software. Er worden uitsluitend originele onderdelen toegepast en de garantie van uw instrument, evenals de certificering (ATEX, EN50379, etc.) blijven intact.

Kalibratielaboratorium

Ons moderne service- en kalibratielaboratorium beschikt over een RvA accreditatie naar NEN-EN-ISO/IEC 17025. Deze accreditatie geldt voor grootheden, zoals gespecificeerd in de scope bij accreditatienummer K105.



Kijk voor een overzicht van al onze diensten op euro-index.nl/diensten



Mobiele Service

Naast de vaste kalibratielaboratoria in Capelle aan den IJssel en Zaventem beschikken wij ook over een laboratorium op wielen met de naam "Mobiele Service". Dit biedt vertrouwde service en kwaliteit, bij u voor de deur!

KWS®

KWS® is een uniek servicesysteem voor uw meetinstrumenten met periodiek onderhoud en kalibratie tegen vaste, lage kosten. Via een gratis webportal (mijnkws.nl) heeft u altijd en overal beschikking over uw kalibratiecertificaten.

Verhuur van meetinstrumenten

- Uitgebreid assortiment
- Nauwkeurigheid aantoonbaar door actueel kalibratiecertificaat
- Deskundig advies
- Complete levering inclusief accessoires

EURO-INDEX Academy

- Trainingen (individueel en klassikaal)
- Cursussen en workshops
- Demonstratie- en instructievideo's
- Whitepapers



Servicebalie



Onderhoud, reparatie en kalibratie



Cursussen en workshops



Mobiele Service

Wijzigingen voorbehouden EURO-INDEX® NL 21004



NEDERLAND
Rivium 2e straat 12
2909 LG Capelle a/d IJssel
T: 010 - 2 888 000
F: 010 - 2 888 010
verkoop@euro-index.nl
www.euro-index.nl



BELGIË
Leuvensesteenweg 607
1930 Zaventem
T: +32 - (0)2 - 757 92 44
F: +32 - (0)2 - 757 92 64
info@euro-index.be
www.euro-index.be