

MULTIFUNCTION
ANALYZER



CONSUMPTION



RS-485

FEATURES

- The **iKron 05-D** is an instrument conceived to measure electrical parameters in AC systems, such as energy consumption, current, voltage and others
- Applicable either on low, mid or high voltage, mono-phase, two-phase or three-phase systems, since it is possible to program the potential and/or current transformer ratios and the connection diagrams
- Measurement readings can be obtained locally (through a LED display, with 7 segments and 4 digits) or remotely, using RS-485 or pulse interfaces

APPLICATIONS

- Submetering
- Energy Efficiency
- Energy Cogeneration systems (4-quadrant metering, delivered and received power)
- Automation systems
- Analysis of electrical circuits and equipment
- Analog Instrument substitution
- Any application related to energy and electrical parameters measurements

PRODUCT INFO

ELECTRICAL PARAMETERS – 38

- Includes current, voltage, frequency, energy consumption, energy demand, active, reactive and apparent powers, power factor and other parameters

CONNECTION DIAGRAMS

- Mono-Phase, Two-Phase or Three-Phase systems (configurable)

INSTALLATION

- Panel background, DIN rail
- Technical support via e-mail, telephone, WhatsApp and YouTube videos

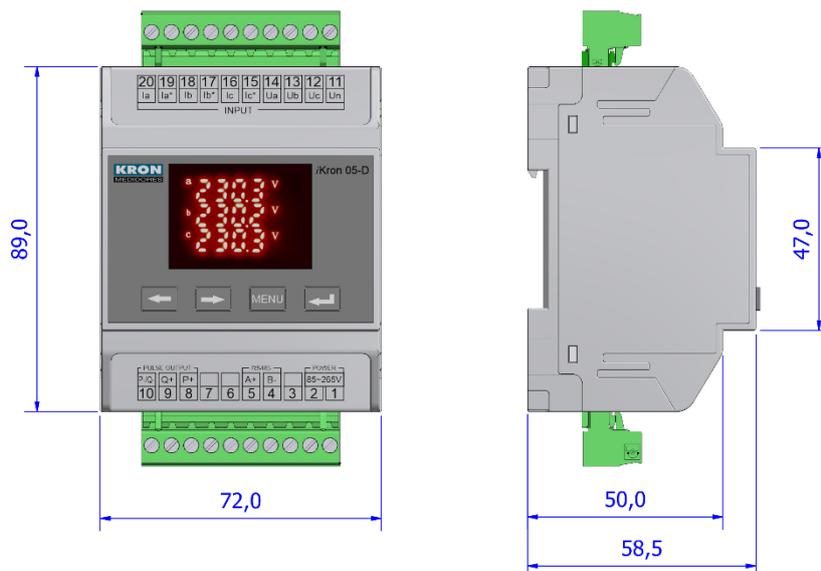
INTERFACES, READINGS & CONFIGURATIONS

- Man Machine Interface (MMI) composed of displays (LED) and four navigation keys, allowing local reading and configuration
- Software for reading and parameterization: RedeMB (RS-485)
- Modbus-RTU protocol, allowing integration to PLCs, master MMIs, supervisory systems and data concentrators
- Includes pulse output, for remote reading of active or reactive inductive energy, using wired connection to external device inputs (CLPs, mechanical counters, etc.)

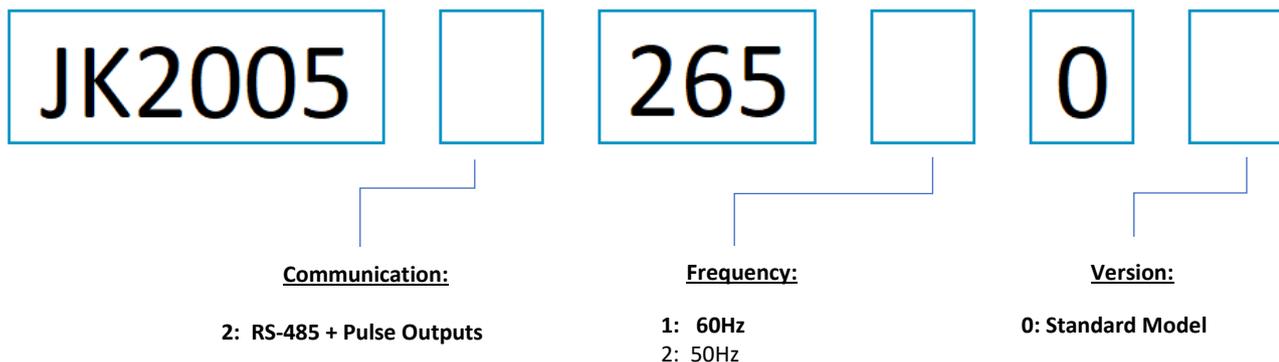
ELECTRICAL GREATNESSES	<i>Instantaneous</i>	Voltage (Ph-Ph, Ph-N and 3Ph), Current (Ph, N and 3Ph), Frequency, Active, Reactive and Apparent Power (Ph and 3Ph), Power Factor (Ph and 3Ph)
	<i>Energy</i>	±Active Energy kWh (Consumption and Supply) ±Reactive Energy VARh (Inductive and Capacitive Loads) Active and Apparent Demand (Average and Maximum)
MEASUREMENTS AND INPUT INFO	<i>Connection Diagrams</i>	Three-Phase (Star and Delta), Two-phase and Single-Phase
	<i>Voltage – Working Range</i>	20 to 500Vac (F-F) (1.5 Vmax overload (1s))
	<i>Current – Working Range</i>	20mA to 7,5Aac
	<i>Frequency – Working Range</i>	45 to 65Hz
	<i>Connection</i>	Quick coupling terminal (IP-00)
	<i>Maximum Cable to be Used</i>	2,5mm ² for measurement inputs 1,5mm ² for power supply and pulse output
	<i>Internal Consumption</i>	<0.5VA
POWER SUPPLY	<i>Voltage</i>	86 to 265Vac/Vdc
	<i>Internal Consumption</i>	< 5VA
ACCURACY at 25°C (77 °F), referred to the full scale	<i>Voltage, Current and Powers</i>	0.5% + 1 digit
	<i>Frequency</i>	0.5% + 1 digit
	<i>Power Factor and Energies</i>	0.5% + 1 digit
COMMUNICATION	<i>Connection/Protocol</i>	RS-485 - Modbus RTU
	<i>RS-485 Cabling</i>	Shielded cables, with at least two twisted pairs (2x24 AWG), minimum section of 0.25mm ² and characteristic impedance of 120ohms
	<i>Transmission Speed</i>	9600 or 19200 bps (configurable)
	<i>Data Format</i>	8N1, 8N2, 8E1 or 8O1 (configurable)
DISPLAY	<i>Addressing</i>	1 to 247 (configurable)
	<i>LED</i>	High-bright red LED Display, 4 digits and 7 segments
PULSE OUTPUT	<i>Parameters</i>	Positive Active Energy and Positive Reactive Energy (inductive load)
	<i>Type</i>	Open Collector Voltage Range: 5 to 48Vdc Pulse Width: 90ms Max. Current: 50mA Max. Frequency: 10 Hz
CASE	<i>Material</i>	Thermoplastic
	<i>Mass</i>	0.5Kg
	<i>Protection Degree</i>	IP-20
ENVIRONMENTAL CONDITIONS	<i>Operation Temperature</i>	-10 to 50°C (14 to 122°F)
	<i>Storage Temperature</i>	-25 to 70°C (-13 to 158°F)
	<i>Relative Air Humidity</i>	Maximum of 85% (without-condensation)
	<i>Temperature Coefficient</i>	50ppm/°C
STANDARDS	<i>Electrical Parameters</i>	IEC 61000-4-2 IEC 61000-4-3 IEC 61000-4-4 IEC 61000-4-5 IEC 61000-4-6 IEC 61000-4-8 IEC 61000-4-11 CISPR 11

- For further information, see User Manual

DIMENSIONS



How to Specify:



The bold signaled items indicate the standard options, which have higher stock availability

Standard Model (Example):

JK2005 2 265 2 0 0

iKron 05-D {RS-485 + Pulse Outputs} {Frequency 50Hz} {Standard Version}

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For correct utilization of the product, the User Manual must be consulted before its installation or operation.
Some items presented here may be optional, being necessary the correct product specification by their code.

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