## **ENERGY SECTOR**





# REMOTE DISPLAY **iRD500**

- **REMOTE APPLICATION** FOR MEASURING TRANSDUCERS iMT560, iMT550, iMT540.
- NETWORK CONNECTION FOR UP TO **32 TRANSDUCERS**.
- RS485 COMMUNICATION.
- UNIVERSAL POWER SUPPLY 48-276V AC, 20-300V DC.
- MULTILINGUAL SUPPORT.



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#### **FEATURES**

- $\circ$  Measurements of instantaneous values of more than 140 quantities (U, I, P, Q, S, PF, PA, f,  $\phi$ , THD, MD, energy, energy cost by tariffs, etc.).
- Remote application for measuring transducers iMT560, iMT550, iMT540, iMT440, iMT416, iMT418.
- Remote application for measuring centres iMC7xx, MC6xx, iMC3x0.
- Remote application for energy meters IE38
- Network connection for up to 32 transducers.
- RS485 communication.
- Universal power supply 48-276V AC, 20-300V DC.
- Graphical LCD 128 x 64 dots.
- Multilingual support.

#### **APPLICATION**

Remote display is very useful for a quick look-up to all measured parameters or to set up the iMT5xx measuring transducers without the PC. Navigation keys and graphical LCD display enable remote application and remote display settings. By choosing different RD500 target communication addresses it is possible to track measurements and change settings for up to 32 iMT5xx measuring transducers.



#### **TECHNICAL DATA**

Rail mounting according DIN EN60715.

#### **ELECTRONIC FEATURES:**

•	LCD Type	Graphic LCD
	LCD Size	128 x 64 dots
	LCD refreshing	Every 200 ms
	Response time	
	Input $ ightarrow$ display	
	All calculations are averaged of	over an interval
	of between 8 to 256 periods. P	reset interval is
	64 periods, which is 1.28 secon	d at 50 Hz.

#### LED'S:

- Communication Green, Communication with RD500 in progress
- Alarm Red, Fulfilled condition for alarm

#### COMMUNICATION:

- Type RS485
- Connection terminals

### DB9 connector

#### POWER SUPPLY, universal

•	AC Rated voltage	48 V276 V
•	AC Rated frequency	45 Hz65 Hz
•	DC Rated voltage	20 V300 V
٠	Consumption	< 5 VA

#### SAFETY FEATURES

- Safety
- EU Directive on low voltage 2014/35/EU.

In compliance with EN 61010–1: 2010

300 V rms, installation category III Pollution degree 2

• EMC

EU Directive on electromagnetic compatibility 2014/30/EU.

- In compliance with EN 61326-1:2013
  - Protection In compliance with SIST EN 60529: 1997. Front side: IP52.

Rear	side:	IP20.

- Ambient conditions
   Climatic class
   In compliance with EN 62052–11: 2003
- Operation temperature -5 to +55°C
- Storage temperature -25 to +70°C
- Max. humidity  $\geq$  90% r.h.



#### CONNECTION

#### Mounting

Remote display is designed for panel mounting. Before inserting the device into the panel cut-out, removes four nuts and flat washers, insert it and position the nuts and flat washers. Fix device to the panel. Recommended panel cut out is 4 inch (picture below).



#### POWER SUPPLY

Connection of universal power supply to terminals 13, 14.



#### **DIMENSIONAL DRAWING**

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#### **CONNECTION TABLE**

Terminals	Pos.	Data	Description
	1	Not connected	-
RD500	2	-	Do not connect!
	3	_	Do not connect!
$\frac{8}{7}$ $\frac{A}{B}$	4	Not connected	-
	5	_	Do not connect!
0	6	Not connected	-
	7	To/From	В
	8	To/From	А
	9	Not connected	-
	1	-	Grounding ( <del>볼</del> )
iMT5X0	2	-	Vcc
	3	To/From	А
6 GND 5 GND / 4 B	4	To/From	В
	5	-	Grounding ( ≟ )
	6	-	Grounding ( <del>볼</del> )

#### DISPOSAL

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The manufacturer or provider shall take waste equipment free of charge.

#### **DICTIONARY:**

RMS	Root Mean Square
TRMS	True Root Mean Square
PO	Pulse output
TI	Tariff input
PA	Power angle (between current and voltage)
PF	Power factor
THD	Total harmonic distortion
Ethernet	IEEE 802.3 data layer protocol
MODBUS/DNP3	Industrial protocol for data transmission
MiQen	ISKRA setting and acquisition Software
AC	Alternating quantity
IR	Infrared (optical) communication



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