

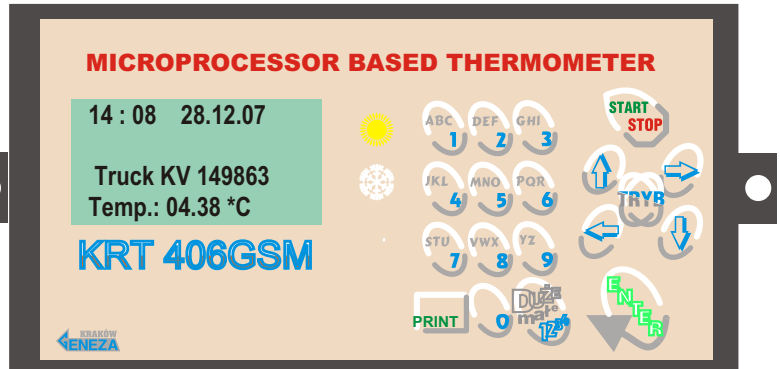


Microprocessor based Thermometer Model KRT 406 GSM

 DYREKTOR OKRĘGOWEGO URZĘDU MIAR W KRAKOWIE Wydział Termodynamiki ul. Krupnicza 11, 31-123 Kraków tel.: 012-422-26-11, 012-422 18 67, wew: 27, 28, 29, 30, 40, fax: 012-422-84-63 e-mail: oum.krakow.krakow@gum.gov.pl www.urzadmiar.krakow.pl		
ŚWIADECTWO WZORCOWANIA		
Data wydania: 18 września 2006 r.	Nr świadectwa: 728-W22/788/714-W2-06	Strona 1 z 2
PRZEDMIOT WZORCOWANIA	Cyfrowy miernik temperatury Model KRT-406/206 D, nr fab. 030906 Prod. P.W. „Geneza” Sp. z o.o. Kraków	
ZGŁASZAJĄCY	P. W. „Geneza” Sp. z o.o., 31-579 Kraków, ul. Narciarska 2	
METODA WZORCOWANIA	Metoda porównawcza. Zakres wzorcowania -50°C ÷ +200°C	
WARUNKI ŚRODOWISKOWE	Temperatura otoczenia: 23,7°C	
DATA WYKONANIA WZORCOWANIA	8 września 2006 r.	
POWIĄZANIE Z WZORCAMI JEDNOSTKI MIARY	Wyniki wzorcowania zostały odniesione do państwowego wzorca jednostki miary temperatury poprzez zastosowanie opornika dekadowego typ 1106a/YR Nr 117.041 oraz typ 1106a/YA Nr 117.603 prod. Tettext.	
WYNIKI WZORCOWANIA	Podano na stronie 2 niniejszego świadectwa wraz z wartościami niepewności pomiaru.	
NIEPEWNOŚĆ POMIARU	Niepewność pomiaru została wyznaczona zgodnie z zaleceniami zawartymi w dokumencie EA-4/02 „Wyrażanie niepewności pomiaru przy wzorcowaniu”. Podane wartości niepewności stanowią niepewności rozszerzone przy poziomie ufności ok. 95% i współczynniku rozszerzenia k=2.	
 Z upoważnienia Dyrektora STARSZY INSPEKTOR <i>mgr Dorota Florjan</i>		
<small>Niniejsze świadectwo może być okazywane lub kopiowane tylko w całości. Nie jest ważne bez podpisów i pieczęci.</small>		



Description.

Microprocessor based THERMOMETER model KRT - 406 GSM is a modern device designed to measure temperature even in **four different places** and is also able to record measure result in its internal, nonvolatile memory or print them on a portable printer PORTI S30/40. Through RS-232 or RS-485 socket it can communicate with a PC computer. RS-485 socket allows to connect up to 8 units of KRT - 406 GSM to only one computer PC by a triple wire line. Internal, nonvolatile, memory enable to record up to 50 000 records at intervals ranging from 1 minute to 99 hours. Results recorded in the internal memory might be transferred to the computer PC directly connected to the KRT - 406 GSM's RS-232 output. **In the field operation, a portable, battery powered printer can be directly connected to the KRT - 406 GSM thermometer.** The user can select chart or graphs printout using a thermohygrometer's keyboard. This sophisticated thermometer covers temperature range from **-90°C to +300°C** with resolution 0.02°C. Higher accuracies, grater than typical electronic thermometers are achieved through a unique linearising technique.

Application of the internal microprocessor ensure a minimal measuring error and a large alphanumeric easy-to read LCD display enable simply read-out results. Nonvolatile memory stores setup conditions (RS-232, log intervals, probes calibration etc) and also user's settings selected from the keyboard. The meter also includes a real time clock which shows time, day month and year. The meter accepts up to **four temperature probes** with very long cables (up to 100 meters each).

The KRT -406 GSM features a quick disconnect panel input for all probes. The model KRT - 406 GSM also contains visual alarms. Simultaneous alarm points for temperature are user selectable. When the current condition exceed any of the preset values, special icons on the front panel lit.

This model also features the special port to **connect the GSM modem** in order to sending the **alarm SMSes** or **current measurement results on even three mobile telephones (on demand).**

Easy routine maintance and small size provides an excellent comfort of recording and wide application in scientific research, enviroment measurement, food industry and many others.

Technical data:

- Input :** four or two Pt-100 temperature probes (4 wire)
- Distance between probes and meter:** up to 100 meters
- Temperature probe calibration:** automatic matching at 0°C
- Temperature measuring and logging range :** **-90°C do +300°C**
- Resolution of current temperature :** 0,02°C
- Accuracy of temperature measurement:** ± 0,15 % of the range
- Log interval:** from 1 minute to 99 hours (programmable through the meter's keyboard)
- Start/End of the logging:** through the meter's keyboard
- Connection to PORTI S30/40 printer :** RS-232 port on the KRT - 406 GSM housing
- Communication with computer PC :** RS - 232 (distance to computer PC up to 4 meters)
 industrial RS - 485 - special converter necessary - (distance from computer PC up to 100 meters)
- Temperature display:** 4 x 16 alphanumeric LCD display
- Device status display:** 4 x 16 alphanumeric LCD display
- Switching of measuring channels:** through meter's keyboard
- Data logging (programmable by the user):**
- 1.storing in the nonvolatile, internal memory (up to 12 500 logs for each channel) and further transferable to the PC and/or to the **portable printer** with the time and date stamp as a chart or grahps
 - 2.On-line output to the PC through RS-232 serial interface or RS-485 industrial interface for further analysis, storage and hard copy printouts
- Power:** 9 V or 12V dc or 230 V ac through an adapter
- Housing:** black plastic adapted to be hanged on a wall
- Dimensions:** L200 x H95 x D37 mm