

# TEMPERATURE RECORDER G0841 WITH PRINTER

T-PRINT G0841W - with output for G9000 wireless unit

T-PRINT G0841M - with built-in GSM modem



## USE:

- printout of temperature record during transport of food, pharmaceuticals, flowers, live animals and other goods
- designed for outdoor installation e.g. on semi-trailer of the truck

## FEATURES:

- record from one or two temperature probes
- two binary inputs for event record - door opening, fridge unit on/off
- Delivery Ticket, Journey Ticket and Multi Day printouts
- numerical or graphical printout of temperature
- fast print to usual 57mm thermo paper in 10m rolls
- 3400 record lines/one paper roll, 5 years printout archivability
- large graphic illuminated display
- indication of temperature exceeding by LED and acoustically
- record of actual or average values at logging interval
- USB interface for record download to the PC, free PC program
- calculated MKT - mean kinetic temperature of pharmaceuticals
- included RS232 link for GSM modem connection
- cyclic record - oldest values in memory are overwritten by new
- no need to download data - large 1MB memory stores up to 5 years
- robust heavy duty PA and polycarbonate case, easy installation
- degrees of Celsius and Fahrenheit
- included traceable calibration certificate
- fifteen selectable languages - e.g. English, German, French, Italian, Polish, Dutch, Spanish, Portuguese, Romanian, Czech
- TÜV SÜD certified to conform EN 12830, Class 1 and EN 13486, Class 1 for the transport of food



T-PRINT G0841, G0841W,  
G0841M, G0841MW and  
wireless alarm unit G9000

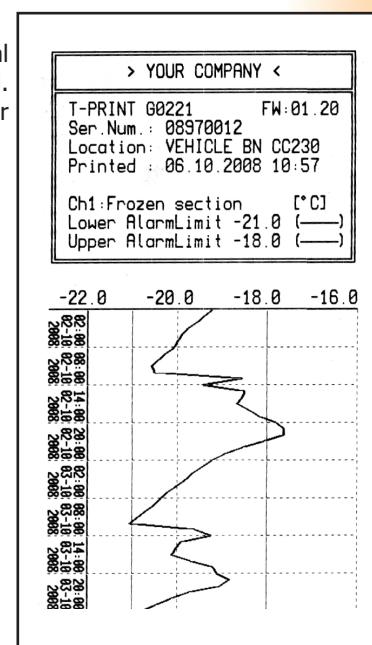
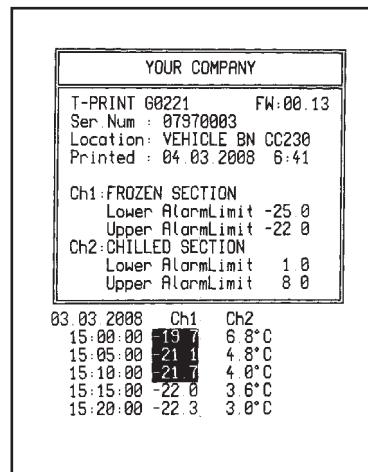
## TECHNICAL PARAMETERS

Measuring temperature range:	-90 to +260°C
Operating temperature range:	-30 to +65°C
Operating temperature range of the printer:	-20 to +50°C
Compatible temperature probes:	with two-wire Pt1000 sensor, maximum cable length 20 meters
Accuracy of the input without probe:	±0.2°C
Resolution:	0.1°C
Connection of temperature probes:	to terminals under removable recorder electronics
Logging interval:	user selectable from 1 minute to 60 minutes
Memory capacity:	1MB - 172 032 records from one probe, 102 400 records from two probes (up to 5 years with 15 minutes interval and one probe)
Power:	9 to 32Vdc, protected against alternator load shedding+internal Lithium battery
Consumption while printing:	approximately 8 W
Consumption - not printing:	approximately 0.1 W
Dimensions, weight:	approximately 250 x 242 x 110 mm (w x h x d), weight 1650 grams
Protection:	IP65

## Included accessories:

Traceable calibration certificate from the manufacturer with declared metrological traceability of etalons is based on requirements of EN ISO/IEC 17025 standard. Included is also roll of paper with 5 years print-out archivability, USB cable for communication with the PC, battery for internal clock.

It is possible to download free basic program for Windows anytime. Program enables to control all recorder's functions and viewing and printing of record in numerical and simple graphic format. It is possible to export recorded temperature values to dbf or txt formats for further analysis. It is necessary to order temperature probes - see further.



## TEMPERATURE RECORDER G0841 WITH PRINTER

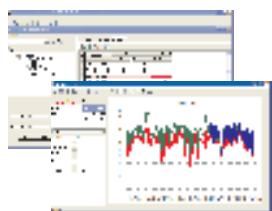
**T-PRINT G0841W - with output for G9000 wireless unit**

**T-PRINT G0841M - with built-in GSM modem**

**T-PRINT G0841MW - with output for G9000 wireless unit**

**and built-in GSM modem**

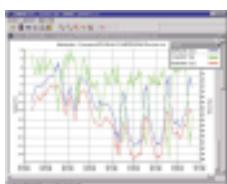
### Optional accessories:



**DBL**

DBL Logger Program - database program for work with data from Comet loggers. Program enables i.a.:

- To set locally the GSM modem via RS232 link by means of the QMS2901 cable.
  - To view selected channels from any Comet logger together with selected channels of other Comet loggers.
  - Measurement from different Comet devices is possible to combine in one table or graph.
  - To choose any time interval for analysis.
  - Print, export to PDF - table and graph.
- Other freeware needed for system operation:
- database server Microsoft SQL or MySQL
  - see also page 23



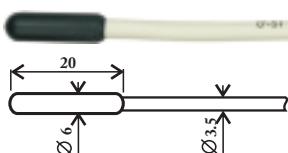
**SWR001**

Optional software for Windows - color printing, vertical and horizontal zooming of graphs and other functions. Calculation of MKT - mean kinetic temperature of pharmaceuticals in the program - see also page 23.



**SW100**

CD with free PC program.



**Probes Pt1000**

Temperature probes with Pt1000 sensors equipped with no connector - there is a symbol /0 behind probe name. Recommended is watertight probe Pt1000TR160/0 on the cable. Specify required cable length 1, 2, 5, 10, 15 or 20 meters.

Available probes: Pt1000TR160/0-2m, Pt1000TR160/0-5m, Pt1000TR160/0-10m, Pt1000TR160/0-15m, Pt1000TR160/0-20m.



**SA200A**

Magnetic door contact, connectable to recorder's binary inputs, without cable.



**SA200A-2  
SA200A-5  
SA200A-10  
SA200A-20  
SA200A-30**

Magnetic door contact, connectable to recorder's binary inputs with cable lengths 2, 5, 10, 20, 30 meters.



**G9000**

Wireless alarm unit with display for driver's cabin. Compatible with G0841W model.

Audible and LED alarm in case of exceeding set temperatures inside of the semi-trailer.

Also signals the state of the binary inputs.

Operating distance from the semi-trailer - approximately 50m.

Powered from included battery - life approximately 3 years.

Included self adhesive Dual Lock for easy installation.



**PR033**

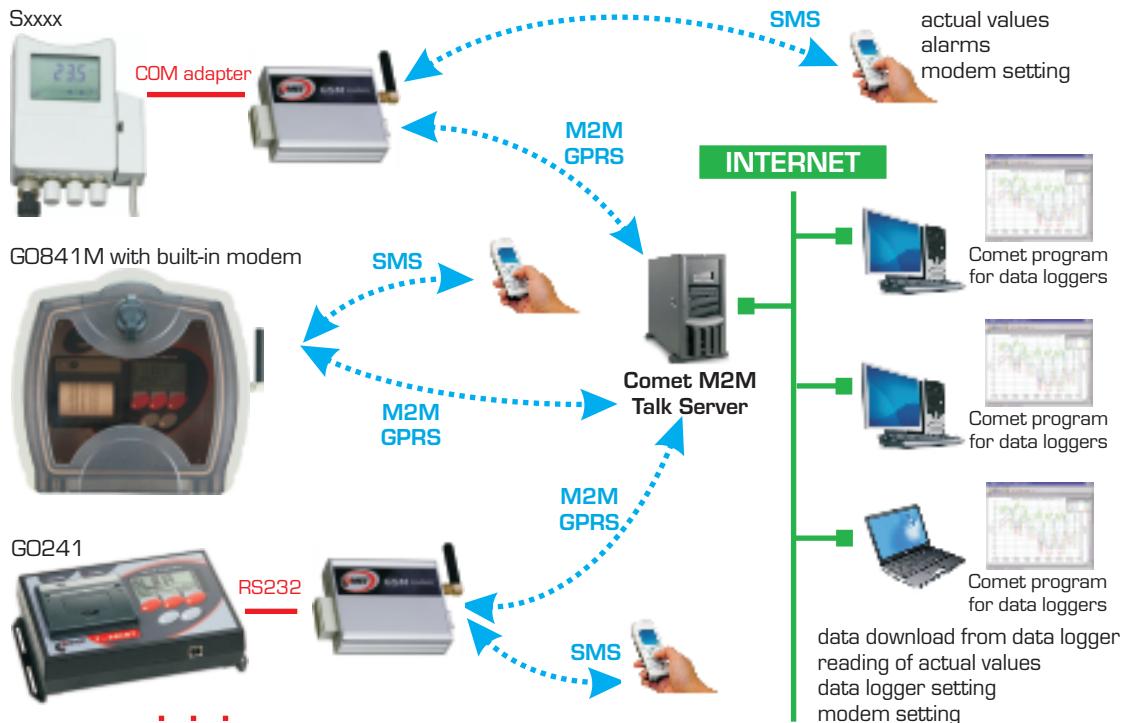
Spare roll of thermo paper - width 57mm, length 10m, 5 years archivability.



**A1940**

Ac/dc adapter 230V-50Hz/24Vdc/24W for power outside of the vehicle.

# WIRELESS COMMUNICATION WITH LOGGERS VIA GSM



## FEATURES:

### 1. Wireless communication with Sxxxx, Rxxxx loggers via GPRS

- Remote data download from logger
- Logger configuration (setting, erasing of data, etc.)
- Reading of actual values (online display mode)
- All actions available as via COM/USB adapter
- Connection realized via M2M Talk server
- Communication via M2M server can be disabled, if data download is not required = saving of cost (no need to pay GPRS data tariff)

### 2. SMS queries about actual values

- Sending of SMS query to modem phone number returns actual values. After receiving of SMS query modem sends required info in SMS.
- It is possible to limit phone numbers SMS commands are sent from. Same it is also for configuration-service SMS commands.

### 3. Alarm SMS messages - modem sends to phone numbers alarm SMS messages:

- If upper/lower limit of measured value is exceeded
- Information on filling of the logger memory (90% and 100%)
- Information on low logger battery or end of estimated battery approaches.
- Information on logger on/off.
- Error messages (communication error with logger, internal clock error, measured value error)

### 4. Setting of modem

- a) Local - service setting via RS232 link from user program:
  - Setting of configuration
  - Download and erasing of diagnostic log file from modem
  - Upload of new firmware to modem
- b) Remote - via M2MTalk server from user program
  - Setting of configuration
  - Download and erasing of diagnostic log file from modem
  - Log out from M2MTalk server
  - Restart of modem
- c) By means of SMS message
  - Update of application in modem
  - Detection of description and firmware version in GPRS modem
  - Detection of GSM status
  - Enable/disable of alarm evaluation
  - Setting of GPRS parameters for connection
  - Setting of parameters of M2MTalk server
  - Log in and log out with M2MTalk server
  - Halting or restart of application in modem

Every Sxxxx or Rxxxx datalogger in monitoring system is connected via COM adapter to "its" GSM modem LP040. It is necessary to order several items from accessories. Minimum set of one logger connected to GSM contains: Sxxxx or Rxxxx logger, LP002 COM adapter for logger connection to modem, GSM modem LP040, GSM antenna, Ac/dc adapter 230V-50Hz/24Vdc/24W, QMS2901 cable for modem setting, SWR004 Optional PC program for data loggers or DBL Logger Program - database program for work with data from Comet data loggers, fee for using M2M server - see further.

# WIRELESS COMMUNICATION WITH LOGGERS VIA GSM

**Optional accessories for communication with loggers:**

	<b>LP040</b>	GSM/GPRS modem with SIM card holder - without accessories. Enables full communication with data logger via GPRS - data download, logger configuration .. Data logger can be controlled by means of SMS messages from mobile phone. Actual values and alarm status can be received as SMS.
	<b>MP001/1</b>	GSM antenna 3dB for modem, right angled.
	<b>A1940</b>	Power adapter 230V-50Hz/24Vdc/24W for modem.
	<b>QMS2901</b>	Cable for modem setting via serial RS232 link by means of optional PC program for data loggers SWR001. Needed only for local setting of modem during configuration of the operation.
	<b>MP006</b>	RS232/USB converter to QMS2901 cable for modem setting via USB. Needed only for local setting of modem during configuration of the operation.
	<b>MD036</b>	Self adhesive Dual Lock for modem easy installation.
	<b>MP036</b>	Modem wall holder.
	<b>MP037</b>	Modem DIN rail 35mm holder.
	<b>LP012</b>	COM adapter for Sxxxx, Rxxxx logger connection to modem via serial link RS232.
	<b>DBL</b>	DBL Logger Program - database program. Program enables i.a.: <ul style="list-style-type: none"> <li>- To set locally the GSM modem via RS232 link by means of the QMS2901 cable.</li> <li>- To view selected channels from any Comet logger together with selected channels of other Comet loggers.</li> <li>- Measurement from different devices is possible to combine in one table or graph.</li> <li>- To choose any time interval for analysis.</li> <li>- Print, export to PDF - table and graph.</li> </ul>
	<b>SWR004</b>	Optional program for data loggers enables <ul style="list-style-type: none"> <li>* local GSM modem setting via serial link RS232 by means of QMS2901 cable</li> <li>* numerical list of recorded values</li> <li>* comfortable work with graphs</li> <li>* export to dbf or txt format</li> </ul>
	<b>M2M server</b>	One time fee for using M2M server - applied for each data logger with modem.