

Technical Document

GMT4000 - Hazard Remote Panel Operating and Installation Manual

GMT : Gefahrenmeldetableau (German)

Hazard Remote Panel (English)

Revision 1.4

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1 General

1.1 GMT4000

The Hazard Remote Panel (GMT4000) act as an additional display and operating device to connect to control and indication equipments (CIE) of fire detection and fire alarm system (FDAS). It signalizes defined operating conditions (alarm, fault, disconnection) of the FDAS by LED as collective display as well as text at an alphanumeric display. The GMT4000 device operates similar to the FAT4000 device but offers extended functions.



No specific standard concerning GMT4000. All used control functions must be part of the preventive fire protection concept. Display and control functions depend on the serial communication protocol GMT4000 with CIE.

There are all interfaces for redundant and not redundant (RS485) connection to the CIE on board.

The not redundant connection to the CIE is carried out via a RS485 on board or via the plug-in module interface equipped with a M4-module (M4-RS232, M4-RS422, M4-RS485, M4-TTY, etc.). This connection does not comply with the requirements of the standard DIN EN 54-2, 12.5.3 as a first information means for the fire brigade. It is usable as an additional customer device.

For redundant connection of the GMT4000 to the CIE there is a redundancy adaptor ADP4000 to place inside the CIE cabinet and to connect to the serial interface of the CIE. The ADP4000 provides dual connections to the GMT4000 each with data (RS485 bus) and power supply. All wires are supervised. Via the USB interface of ADP4000 all components at the System4000 loop can be programmed - the configuration as well as the firmware-update - the ADP4000 itself and also the remote located components at the loop. The GMT4000 can be configured via the ADP4000 inside the CIE.

The serial interface of the CIE must be set to an adequate FAT protocol inclusive correct parameters. Faults in System4000 can be reported via serial interface if this option is implemented in protocol or by connecting the fault relay of the ADP4000 to a fault input of the CIE.

The power supply in range of 10 .. 30 V DC is normally derived from CIE, thus it operates also when mains failed.

The device will be delivered prepared for operation to connect the CIE / ADP4000. After first installation of a system loop the "Quick-Start" programming should be done to analyse the parameters of connections (e.g. resistance of wires) for correct supervision later. Most of the CIE protocols implement the customer text with each event message, thus the customer texts are not to program in most cases.

For programming the customer texts if required the text data can be edited manually or in most cases imported from adequate CIE specific text files using the programming tool *Prog4000*.

The GMT4000 functions of programmable keys and general displays depend on the serial protocol options for display and reaction.

The GMT4000 is placed inside an steel plate housing. The device can be locked by a key to prevent unauthorized operations.

1.2 General notes

Intended use This product should be used only for the purposes described in the catalogue and only in conjunction with the manufacturer's recommended or approved devices and components.

Warning The proper and safe operation of the product requires proper transport, proper storage, installation, operation and installation.

Safety information for users This guide contains the information required for the intended use of the products described therein..

Qualified personnel in the sense of the safety instructions in this guide or on the product itself are persons, who

- are either familiar as engineering personnel with the security policies of fire detection and extinguishing systems.
- or the maintenance personnel who are trained in dealing with institutions of fire detection and extinguishing systems and know the contents of this related to the operation manual.
- or have as an installer and service personnel to repair such facilities the fire alarm and extinguishing systems necessary training or are authorized to take circuits and equipment / systems in accordance with the standards of safety engineering, ground and tag.

Danger notes The following notes are intended to ensure personal safety and safety against damage of the described product and connected equipment.

Safety instructions and warnings to prevent risk to life or health of users or maintenance personnel or to prevent damage are highlighted in this manual by the following pictograms. The pictograms used have in accordance with this instruction the following meanings:



Indicates that death, serious injury or substantial property damage can happen, if proper precautions are not taken.



Provides important information about the product or part of the manual.

Removal



In compliance with directive 2012/19/EU (WEEE) the electric device will be taken back after removal for properly waste disposal by the producer!

1.3 Features

- universal connecting options via plug-in module interface for TTY, RS232, RS422, RS485 (an according module is part of delivery)
- Interfaces for redundant bus interface and not redundant RS485 on board
- alternatively connection - not redundant or redundant
- easy to handle - similar to FAT4000 and FBF4000
- capacitive key technology
- graphic display offers 6 rows each with 20 chars
- acquisition of customer texts from protocol messages with option for 3rd row (as available)
- 4 keys for display operations (scroll up/down, level right/left)
- 3 keys for operating Buzzer off, Test and History
- 1 key for Ok / acknowledge for special functions
- 4 general displays „Operation“, „Alarm“, „Fault“, „Disconnection“
- 6 programable keys (depending on the protocol with CIE)
- 5 programable single displays (depending on the protocol with CIE)
- acoustic signalling (buzzer)
- History, ESPA4.4.4- and ESPA-X-Protokoll
- integration in System4000 loop with redundant application
- connection via Ethernet possible
- programming software "Prog4000" + Mini-USB-cable
- also available version without additional keys

1.4 Abbreviations

Abbr.	English	Abbr.	German
CIE	Control and Indicating Equipment (EN54) ⇒ FCP	BMZ	Brandmelderzentrale
FACP	Fire Alarm Control Panel ⇒ CIE, FCP	BMZ	Brandmelderzentrale
FAT	Fire brigade indicator panel (Germany)	FAT	Feuerwehr-Anzeigetableau (Deutschland)
FBF	Fire brigade control panel (Germany)	FBF	Feuerwehr-Bedienfeld (Deutschland)
FCP	Fire Control Panel ⇒ CIE, FACP	BMZ	Brandmelderzentrale
FDAS	Fire detection and fire alarm system (EN54)	BMA	Brandmeldeanlage
FRC	Fire related controls	BFST	Brandfallsteuerungen
GMT	Hazard Remote Panel	GMT	Gefahrenmeldetableau
IMT	Synoptic LED tableau (floor plan with LED)	IMT	Intelligentes Melde-Tableau
RE = RT	Routing Equipment Unit Alarm / Fault (equal to RT)	ÜE	Übertragungseinheit (ÜE) Alarm / Störung
RT = RE	Routing Transmission Unit Alarm / Fault (equal to RE)	ÜE	Übertragungseinheit (ÜE) Alarm / Störung
ZPA	Remote indication panel / display (FAT version)	ZPA	Zentralen- Parallanzeige (FAT-Version)

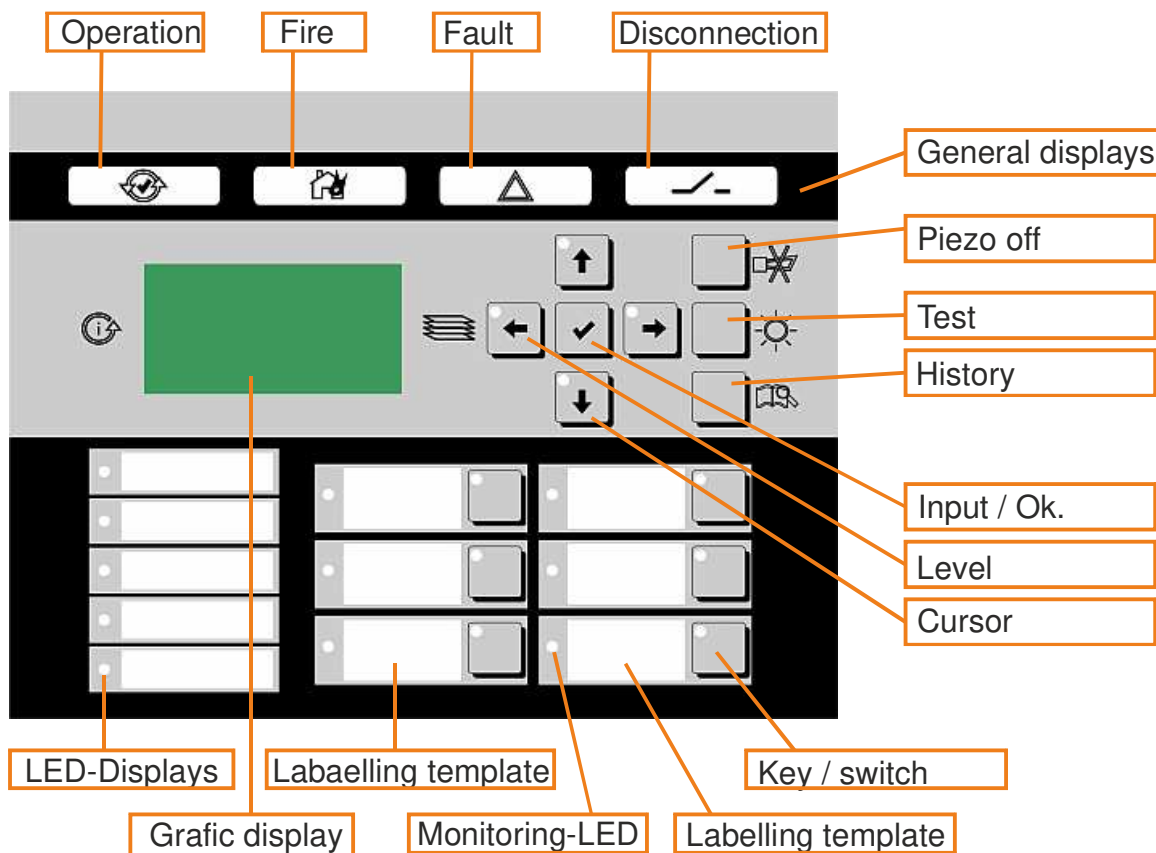
FBF (DE - standard DIN14661)

FAT (DE - standard DIN14662)

2 Operation instructions

2.1 Overview displays- and controls

- LED general displays operation, alarm, fault, disconnection
- graphic display with 6 rows each with 20 chars ⇒ 3rd row for each message possible (overall 128 x 64 pixel)
- cursor keys for selection further messages ↓↑
- keys level ← →
- key buzzer off
- key Test
- buzzer for acoustic signalling, key buzzer off / test
- 5 programmable LED displays (depending on CIE protocol)
- 6 programmable keys / switches with programmable LED (depending on CIE protocol)



Messages from CIE are stored and displayed by GMT4000. Alarm messages are immediately displayed by general alarm and at graphic display. Faults and disconnections are signalled by blinking LED display and can be recalled by key operation. The actual displayed level is marked by a permanent lighting general monitoring LED display.

2.2 LED general displays

Operating condition are signalled by LED display:

LED	color	function
Operation	green	on: ready for operation blinking : power supply on – system fault off : no power supply
Alarm (fire)	red	on : fire event(s) received and displayed at LCD blinking : fire events(s) received, not at LCD displayed, at LCD event of other level displayed off : no alarm event present
Fault	yellow	on : fault event(s) present and display at LCD blinking: fault messages received, not displayed at LCD off : no fault event present
Disconnection	yellow	on : disconnection(s) present and displayed at LCD blinking : disconnection(s) received, not displayed at LCD off : no disconnect event present

A blinking LED signalises that at least one alarm, fault or disconnection event message was received and in data buffer present, but not visualized in graphic display. They can be recalled for alphanumeric display at LCD by operating the keys " ← " / " → ". The actual at LCD displayed level is marked with a permanent lighting general LED display.

With blinking operation LED the devices signalizes a fault in System4000 - fault in redundant loop or fault in CIE communication. Only the permanent lighting operation LED signalizes ready for operation !

With the active boot program of GMT4000 all LED at front side inclusive operation LED are off ! The LCD displays „Bootloader active“. Only the diagnostic LED „OP“ at the rear side of the board is blinking (see chapter 3.6 GMT4000 component).



Disconnected or faulty detectors do not create alarm messages in case of alarm state condition !

2.3 Graphic display

The graphic display (LCD with 128x64 pixel) offers alphanumeric presentation of 6 rows each with 20 characters. It shows messages concerning the state of single detector and / or zones. At the display are one or two messages to display each with 2 or 3 text rows.

Each message can be displayed within 2 or 3 rows. A message starts in first row with zone / detector number using the format zzzzz/dd - zzzzz reserves 5 digits zone number with spaces instead of leading zeros. Detector number dd amounts up to 2 digits separate from zone by a slash if given. The next space separates the following customer text.

If more than 2 events of a level are present at the LCD are 2 events to display. The upper half display is shown the first or by cursor keys selected next message. The lower half display show the last message of this level. By acting the cursor keys up / down the next / previous event will be shown in the upper part of display.

After 20 sec without key actuation the display switches back to normal display when no alarm message is present or shows the first and last alarm event. Only alarm events are shown without key actuating. Fault and disconnect events are to recall by actuating the „Level →“ key. The actual displayed level is marked by permanent lighting of its general LED display.

Date and time display in normal state display are used as sign of life (seconds are permanent changing). If date / time of CIE are in protocol data the date / time of the GMT4000 will be synchronized.

LCD lighting will be actuated by each key operation for about 20 sec or permanent with alarm display at LCD.

When a communication fault is detected in the 1st row of LCD will be an according warning message displayed.

2.4 Acoustic signaller (buzzer)

The acoustic signaller (buzzer) will be activated with each incoming alarm message and can be silenced by operating the key "buzzer off".

The buzzer function is programmable (Programming software → Configuration → Code-Table Editor). This menu defines when the buzzer is permanent or intermittent to activate.

Complying with standard DIN 14662 the buzzer will be intermittent activated with each alarm message and be silenced by key "Buzzer off" or when all alarm events are cleared.

2.5 Manual controls

There are 8 keys for manual controls at GMT4000:

- 2 keys "Cursor ↑↓" (further messages)
- 2 keys "Level ← →"
- 1 key "Buzzer off"
- 1 key „Test“
- 1 key „Enter“ (ok)
- 1 key „History“

There are LED integrated inside the cursor keys to signalize further messages of the actual level available to step in it's direction.

The keys ← → switch the displayed level (alarm, fault, disconnection) when events in according level are present.

The key "Buzzer off" quits the acoustic signal and silence the buzzer.

The key „Test“ activates all displays (LED and LCD) for display testing. All pixel of LCD are on, LCD lighting and all LED are on and the buzzer is activated for this time.



A periodic display should be done when maintenance work is to do. It ensures the correct operation of the displays.

2.6 Time / Date setting

Date and time are automatic synchronized with the CIE's time stamp when available with serial communication protocol.

For manual setting of date / time with normal press both cursor keys for at least 5sec. The editable digit is blinking, the cursor keys up / down will modify the digit - the cursor keys ← → are selecting the next / previous digit. With both cursor keys or the key "Enter" the edit mode will be terminated.

Note: With next date / time message from CIE the time stamp will be synchronized wit CIE !

The display of date / time at LCD can be suppressed by programming the device. In this mode a cursor will be shifted in the last row of LCD for life sign function.

2.7 Maintenance mode

The maintenance mode will be entered by simultaneously pressing the cursor keys "up" and „Ebene →“) for at least 5sec. The display shows alternating the text „Maintenance mode“ and „Buzzer disabled“. This state disables the buzzer of GMT4000 until it is enabled by same keys or after 12 hours automatically.



When maintenance mode is active no buzzer will be activated with messages !

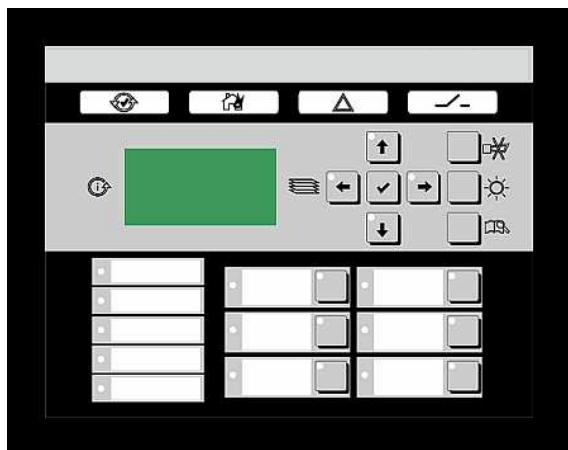
2.8 Display History

The history display is activated by actuating the key "History". The 1st row shows „History“ and row 2 until 4 are used for event display. The cursor keys up and down select the previous / next event of history memory.

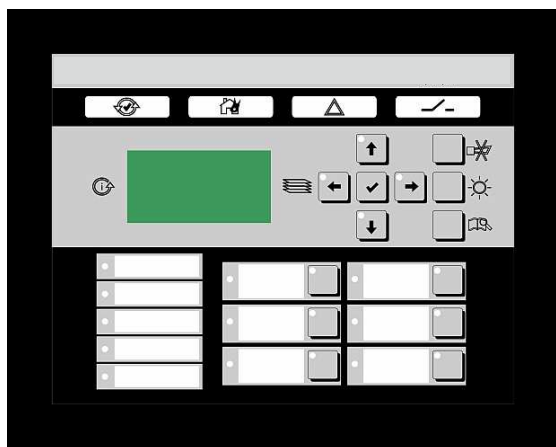
The history display will be terminated after 20 sec without key actuation automatically.

3 Installation instruction

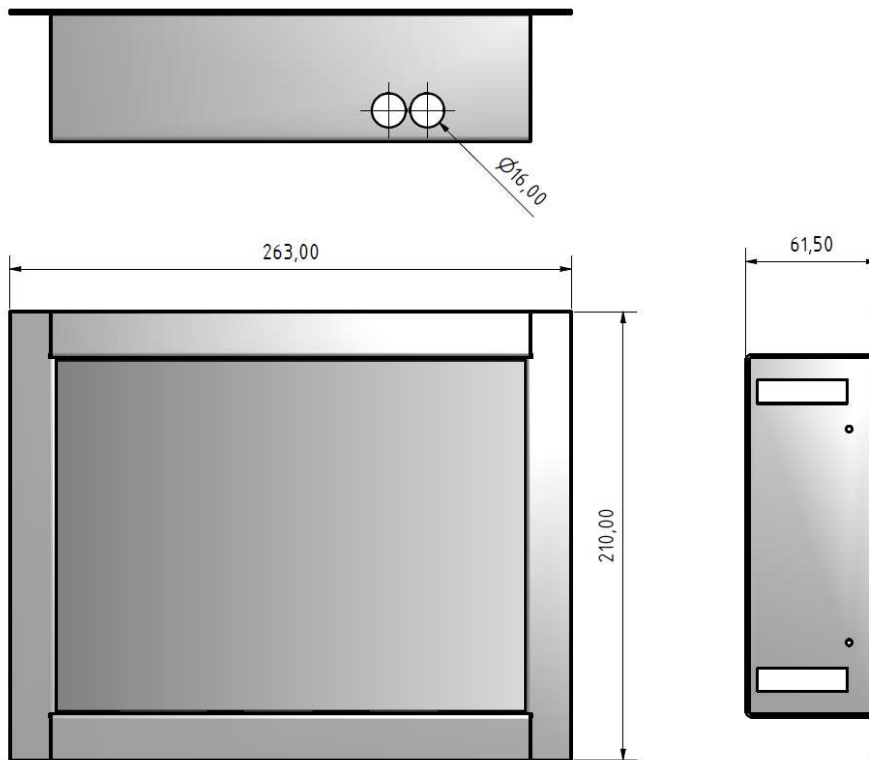
3.1 Cabinet variant surface mounted



3.2 Cabinet variant flush mounted



3.4 Cabinet dimensions flush mounted



3.5 Cabinet installation

There is no specific standard concerning GMT4000 - no special requirements defined, thus the following notes are recommended :

- Surface mounted cabinet should be placed at a height of 1600 (+100/ -200) mm (see FBF),
- clearly visible and easy to operate,
- device easily accessible,
- as appropriate marked with an indicating label,
- sufficient illuminated for good readability of lettering,
- desk or flush mounting possible.

The steel plate housing is solid to screw on the wall - see fastening points (A).

Supply connecting cables via provided cable lead-through (B) - surface mounted or (C) - flush mounted cabinet.

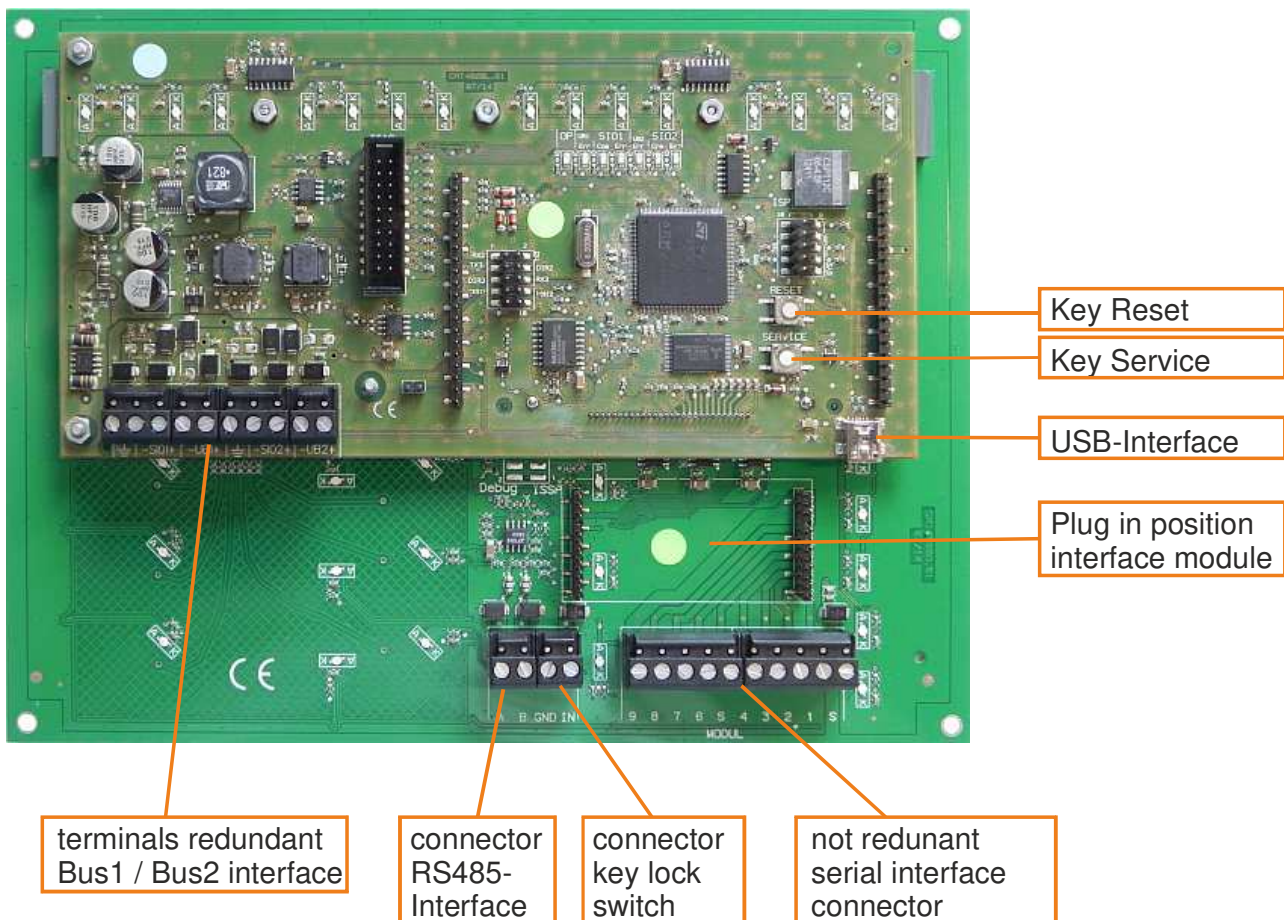


The cabinet should strongly be connected to earth (D)!



Use shielded cable (see Technical data)!

3.6 GMT4000 component



A new technology for key assembly is used (capacitive keys). The front side of the PCB is covered with a film thus it is the front plate - there is no additional metal front plate.

After removing the 4 screws at the front side the terminals at the rear side are available for connecting and the USB interface for programming not redundant connected devices.

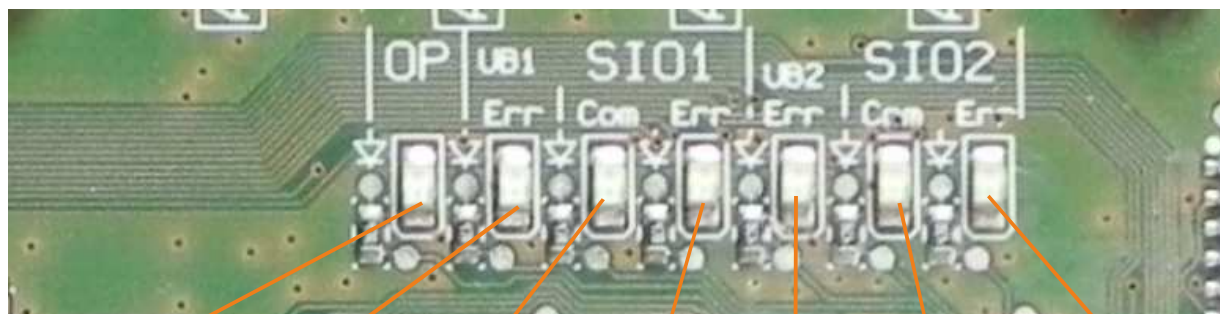
Programming of GMT4000 can be done via the USB interface at the rear side of PCB or if redundant connect via the ADP4000 in System4000 loop.

Overview terminals / connectors at GMT4000:

Terminal	Connection
Bus 1	UB1 (power supply) and SIO1 (data) of redundant System4000 loop
Bus 2	UB2 (power supply) and SIO2 (data) of redundant System4000 loop
not redundant serial interface	Terminals for configurable interface with plug-in M4-Interfacemodule (not redundant connection - M4 module required)
USB	Programming interface for not redundant connected GMT4000
key lock switch	enable control functions by external key lock switch etc.

Overview diagnostic LED at GMT4000:

LED	color	meaning
OP	green	Operation: permanent on: ready for operation, no fault, (power supply ok) blinking uniform: Bootloader active blinking long-on / short-off: fault
UB1-Err	yellow	Fault power supply UB1 at redundant loop
SIO1-Com	green	SIO1 communication okay
SIO1-Err	yellow	Fault SIO1 at redundant loop
UB2-Err	yellow	Fault power supply UB2 at redundant loop
SIO2-Com	green	SIO2 communication okay
SIO2-Err	yellow	Fault SIO2 at redundant loop



Operation UB1-Error SIO1-Com SIO1-Error UB2-Error SIO2-Com SIO2-Error

3.7 Not redundant connection GMT4000 with CIE

For not redundant connection of GMT4000 with the CIE the module interface is used as default application. The not redundant RS485-interface is used for CIE with RS485-FAT-interface. The relevant application depend on the CIE given with a separate specific document.

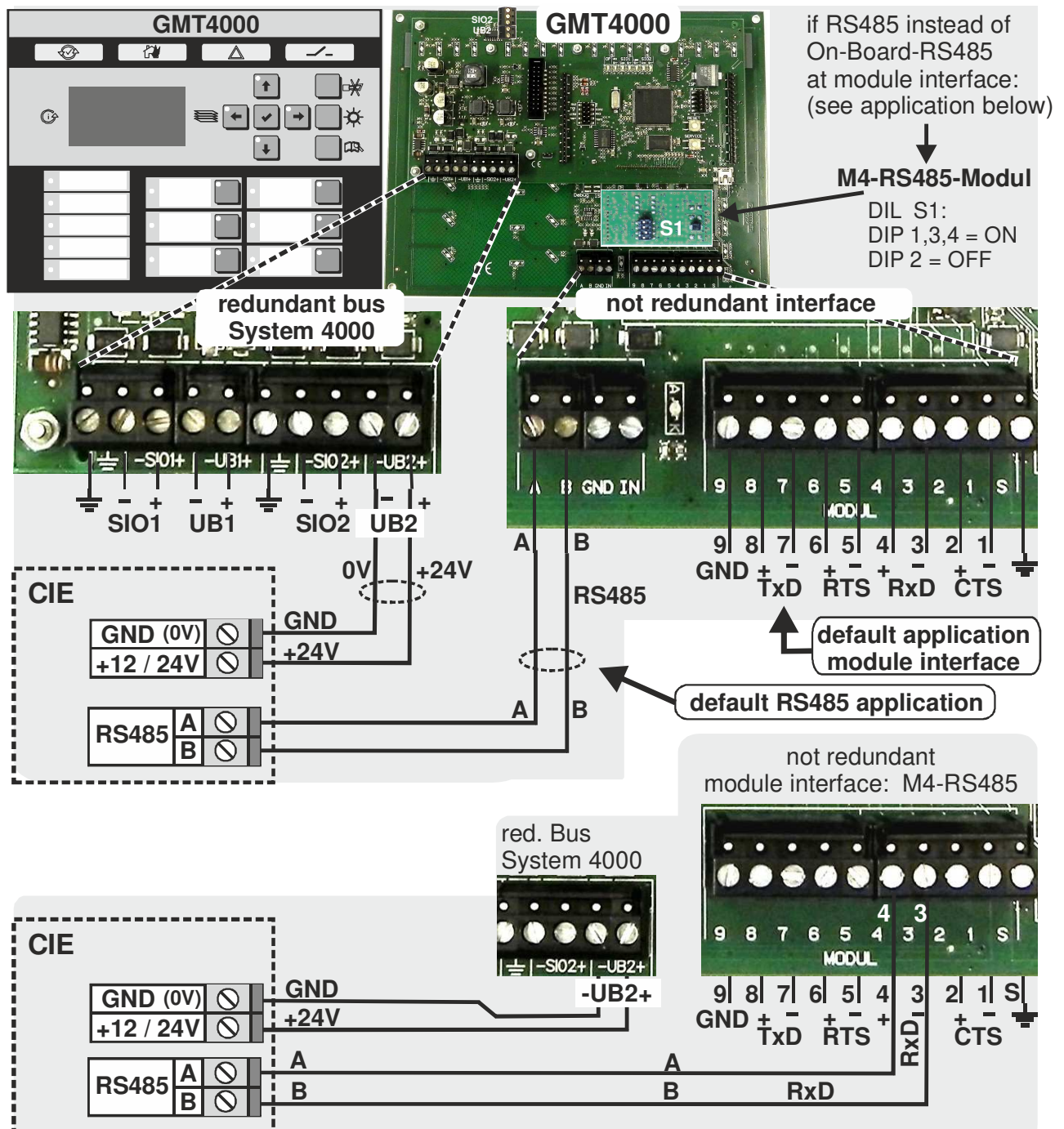
The module interface at GMT4000 must be equipped with an adequate M4-interface module (M4-RS232, M4-RS422, M4-TTY, etc.) - modules are not equal to modules for System3000 etc. !

Power supply is to connect to UB2 or UB1 terminals:



System4000 interface modules are not identical with modules for System2000 / System3000 / IMT-System / ADP-ESPA etc. !

System4000 modules are labelled with "M4-" (M4-RS232, M4-RS422, M4-RS485, ...).
Not used terminals left unconnected.



Terminal assignment at module interface :

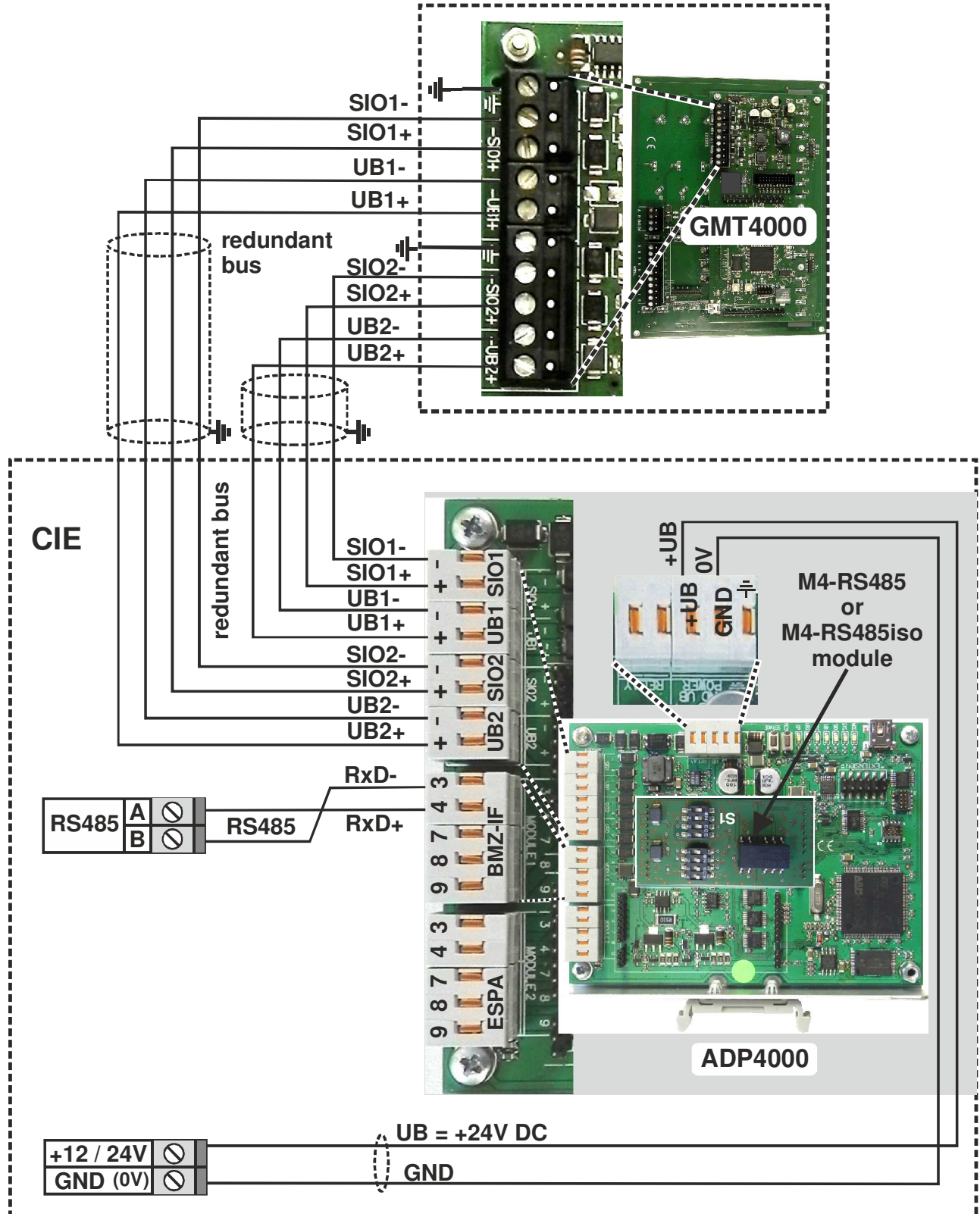
<i>terminals at module interface (SIO3)</i>					
	3	4	7	8	9
module :	signal identifier :				
TTY	RxD-	RxD+	TxD-	TxD+	GND
TTYB	RxD-	RxD+	TxD-	TxD+	
RS232		RxD		TxD	
RS422	RxD- (B) receive	RxD+ (A) receive	TxD- (B) transmit	TxD+ (A) transmit	
RS485	B (-) Bus	A (+) Bus			

3.8 Redundant connection of GMT4000 with CIE



Only the ADP4000 is to connect with the interface of the CIE !
No other devices are allowed connect to CIE interface when ADP4000 is applied !

Example: RS485 application (abstract):



The redundancy adaptor ADP4000 is to connect to the power supply from CIE (e.g. 24V DC, battery supported) and to the serial interface (RS485, RS422, RS232, TTY, etc.) according the specific application (separate document). The ADP4000 supplies the GMT4000 with power.

As default the signals SIO 1 and UB 1 are to connect with terminals SIO 2 and UB 2 of the next device until loop is closed. Signal (SIO1 +) leads to (SIO2 +) and (SIO1 –) to (SIO2 –), general plus signal with plus and minus signal with minus, i.e. SIO-Signal-wires are 1:1 connected.

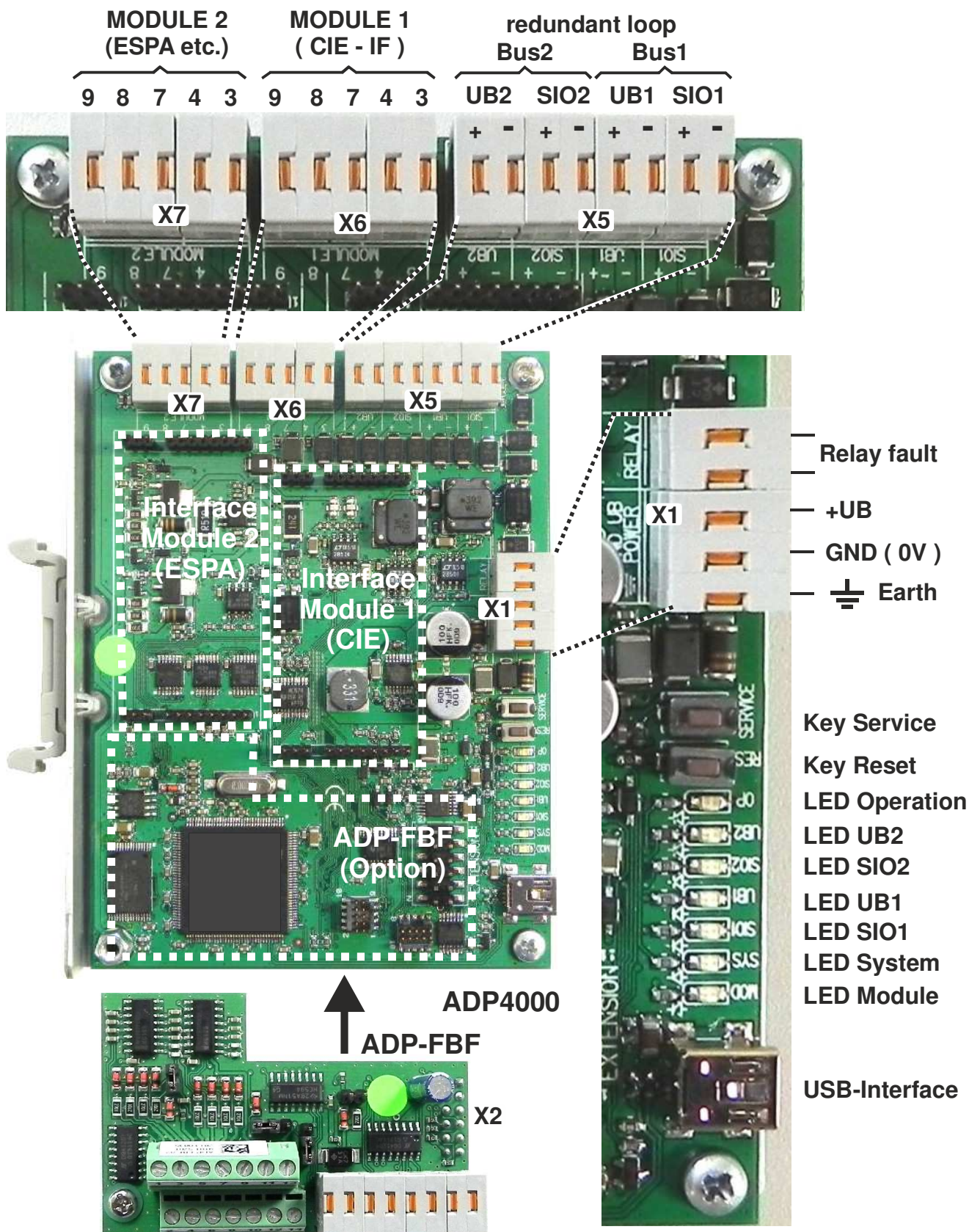
The CIE interface parameters must be set appropriate the application.

Faults detected by GMT4000 and / or the adapter ADP4000 are signalled by the fault relay of ADP4000. The terminals are to connect to an adequate fault input of the CIE.



All GMT4000 in redundant loop are supplied with power via the redundant bus connection !

3.9 Redundancy adaptor module ADP4000



The redundancy adaptor ADP4000 must always be mounted inside the CIE cabinet !
 The redundant bus (Bus 1 / Bus 2) is performed as a loop including all components ADP4000, GMT4000 etc.. The redundant loop comprises data lines and power supply.

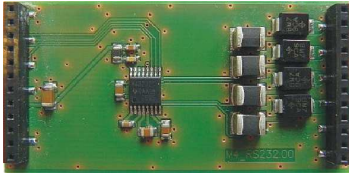
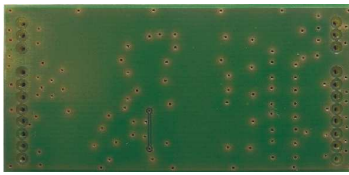
Terminals of adaptor ADP4000:

terminal	signal
Bus 1	UB1 (power supply and SIO1 (data) of redundant loop
Bus 2	UB2 (power supply) and SIO2 (data) of redundant loop
Module 1	Terminals for M4-Interfacemodule (if applied)
Module 2	Terminals for M4-Interfacemodule (if applied)
USB	Programming interface for ADP4000 and GMT4000
Relay	Output opto-relay for fault signalling
Power	Power supply for ADP4000 and devices at redundant loop
FBF-Interface	Interface for ADP-FBF (parallel FBF interface connector)

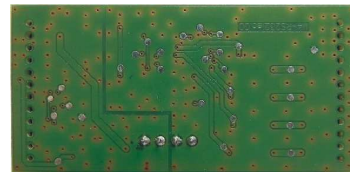
Diagnostic LED at ADP4000:

LED	color	meaning
MOD	yellow	Fault interface module to CIE (module1 / module2)
SYS	yellow	Fault with adaptor ADP4000
SIO1	yellow	Fault with SIO1 Communication at redundant loop
UB1	yellow	Fault with power supply UB1 at redundant loop
SIO2	yellow	Fault with SIO2 Communication at redundant loop
UB2	yellow	Fault with power supply UB2 at redundant loop
OP	green	Operation : permanent on: ok, ready for operation (power supply ok) blinking uniform: Bootloader active blinking long on / short off: Fault

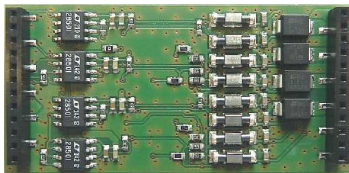
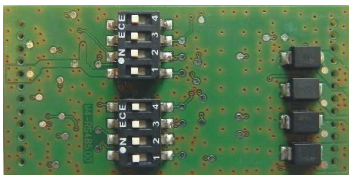
3.10 Interface modules for GMT4000 / ADP4000



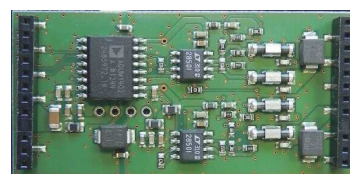
Module **M4-RS232**



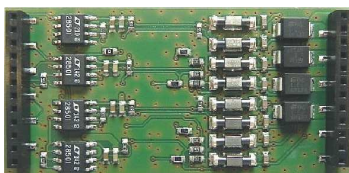
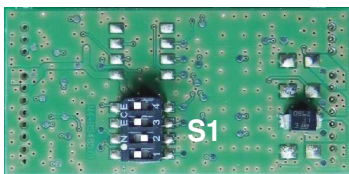
Module **M4-RS232iso**



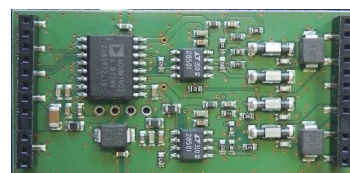
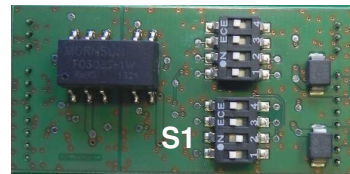
Module **M4-RS422**



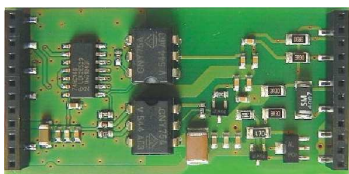
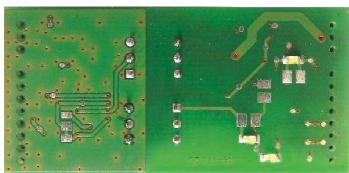
Module **M4-RS422iso**



Module **M4-RS485**



Module **M4-RS485iso**



Module **M4-TTY**

3.11 Mounting variants for adaptor module ADP4000:

<i>type of mounting</i>	<i>assembly parts</i>
CIE - at backplane mounted	ADP4000 - accessory pack ("Beipack")
CIE – DIN rail mounting	DIN rail accessory pack ("Hutschienen-Einbausatz")

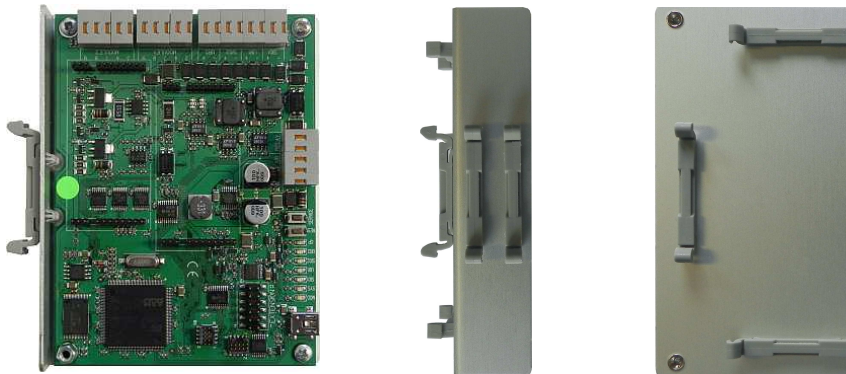
With redundant connection of GMT4000 the redundancy adaptor ADP4000 must be mounted inside the CIE cabinet.

ADP4000 at mounting bracket for DIN rail mounting

The mounting bracket is designed for mounting the adaptor module at a DIN rail. There are diverse drilled holes for DIN rail clips to enable easy installation in multiple positions.



Notes regarding mounting the ADP4000 with mounting bracket at DIN rail please see CIE relevant documentation !



(Part.-No. 9100.0228)
(Art.-Nr. 9100.0228)

3.12 Start up procedure

With energizing or pressing the reset button the system starts up. The green operation LED will light permanent after initializing completed. At the LCD appears the default display (see also chapter 2.3 Graphic display).

When at LCD the default display is shown and the operation LED is still blinking a fault was detected. An adequate fault message will be created with a blinking fault LED and the message can be accessed by operating the "level" key.

If the CIE protocol provides date and time information these data are applied and displayed at the LCD. A correct date / time synchronisation signalizes a successful initialization procedure.

3.13 Relay Fault

Output "Fault" at ADP4000 is configured as an optoelectronic relay with a closing contact for fault signalling. The relay contact is open when no fault in system detected. In case of any errors the contact will be closed. An inverse operation mode can be selected with configuration.

3.14 Display of communication fault

With detected communication fault the green operation LED is set to blinking mode.

The GMT4000 signalizes a communication fault also when default display at LCD by reporting "no communication" at the top row of display. The according fault message can be recalled by operating the "level" key thus adequate action can be done to repair the defect.

3.15 Commissioning GMT4000 (not redundant)

When system is correct installed and all devices are operating faultless normally date and time are properly displayed at GMT4000 (when CIE protocol with time stamp). If GMT4000 or CIE or both report a fault the wiring must be checked as well as the communication parameters. Please use the messages at GMT4000 if there are events in fault level present to specify possible errors.

ADP4000 / GMT4000: Type of protocol with CIE, baudrate / parity / data bits / stop bits

CIE : FAT protocol, baudrate / parity / data bits / stop bits

3.16 Commissioning GMT4000 (redundant)

The redundant connected GMT4000 is communicating with the adaptor ADP4000 via the redundant installed Bus 1 and Bus 2. The system operation state will be signalled by LED to have a powerful help for error search.

LED	color	meaning
OP	green	Operation: permanent ready for operation (power supply ok) blinking if Bootloader is active
UB1-Err	yellow	Fault with power supply UB1 at redundant loop
SIO1-Com	green	SIO1 communication correct
SIO1-Err	yellow	Fault with SIO1 at redundant loop
UB2-Err	yellow	Fault in power supply UB2 at redundant loop
SIO2-Com	green	SIO2 communication correct
SIO2-Err	yellow	Fault with SIO2 at redundant loop

When fault detected in GMT4000-System a internal fault message will be generated and in addition can a fault message be created at CIE. With a single error in System4000 loop messages from CIE are reported by the GMT4000.



Any System4000 fault (concerning GMT4000 or / and ADP4000) will activate the fault relay at ADP4000. This output is to connect with an appropriate fault input of the CIE. This input should be configured with an adequate text.

3.17 Commissioning GMT4000 at branch circuit

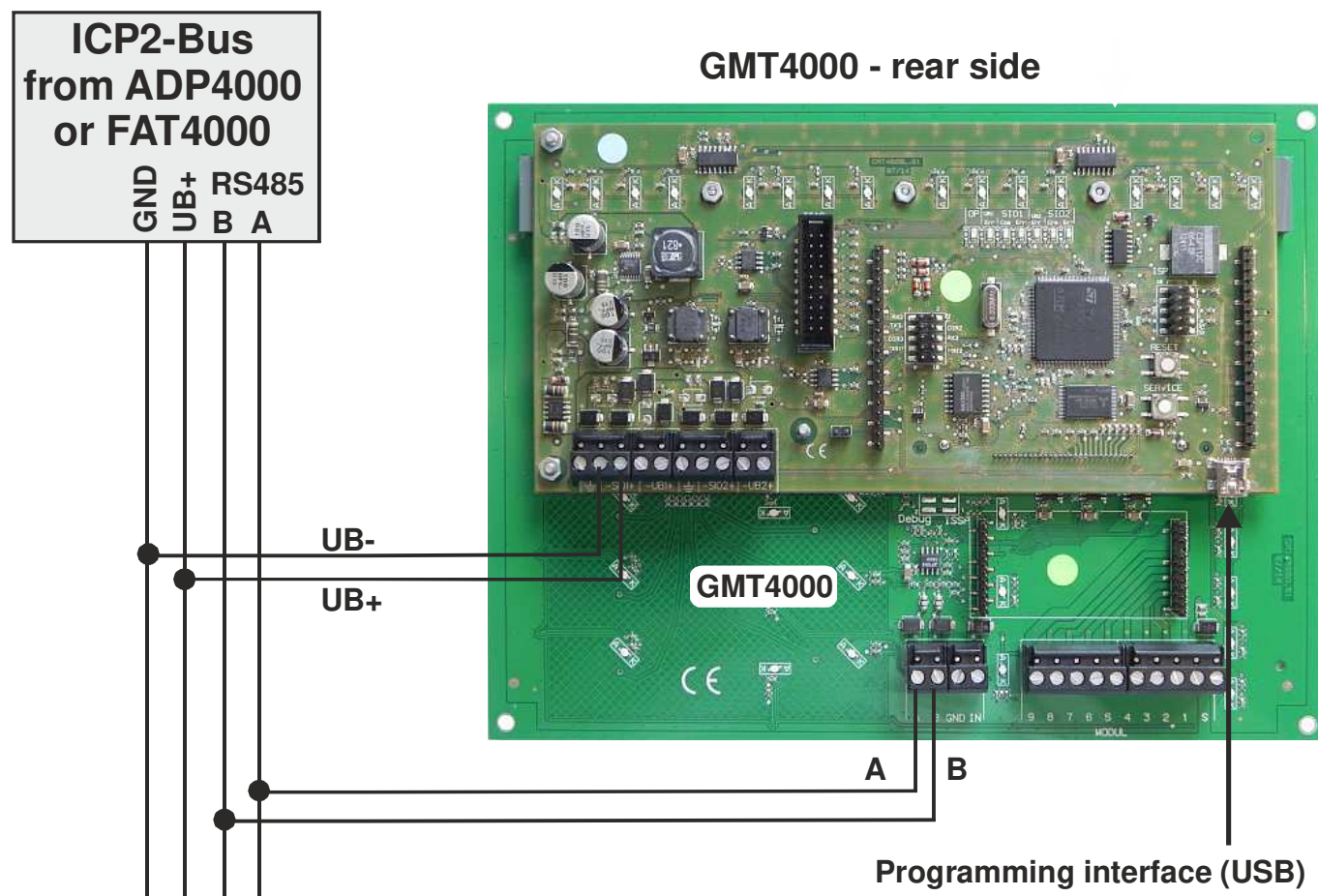
GMT4000 – Slave (RS485 connection via SIO3)



Only FBF functions as control options available !

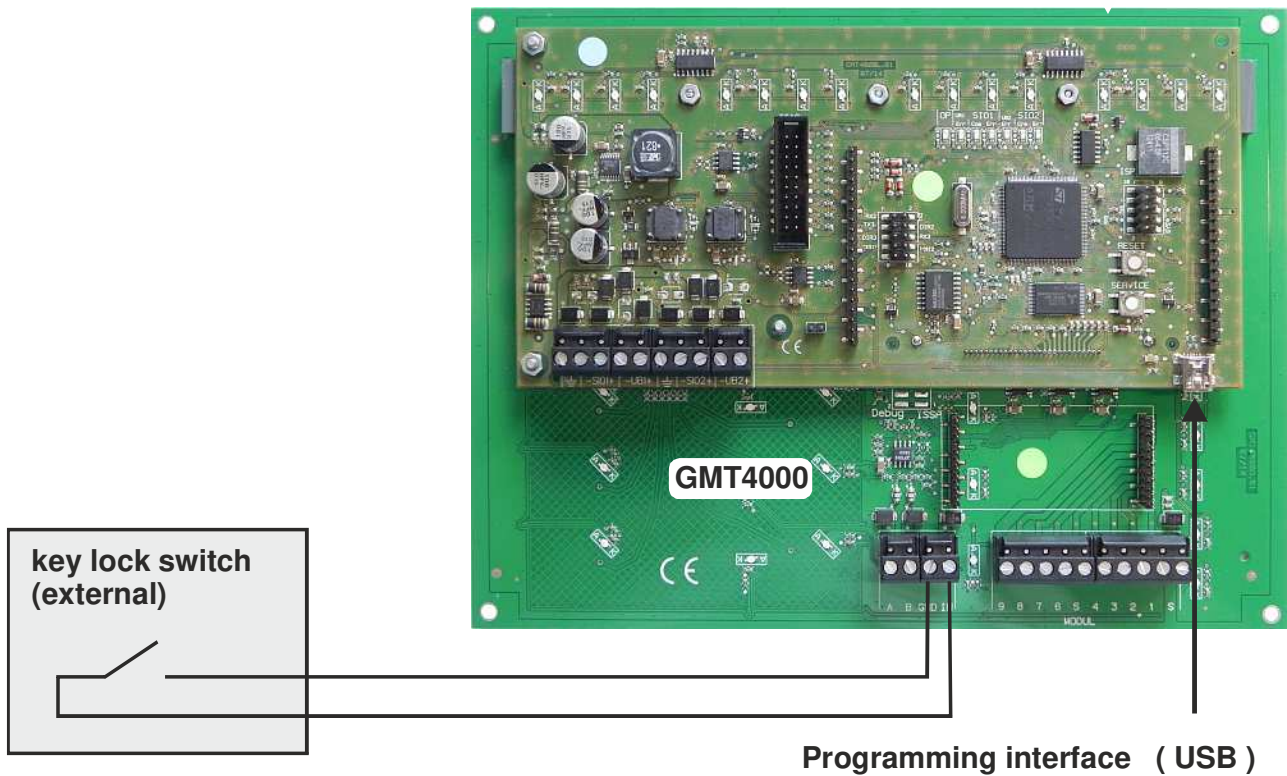
Application via RS485 with ICP2-Firmware version !

GMA-address is used as slave-address.



3.18 Application of terminal keyswitch

GMT4000 - rear side



4 Programming software Prog4000

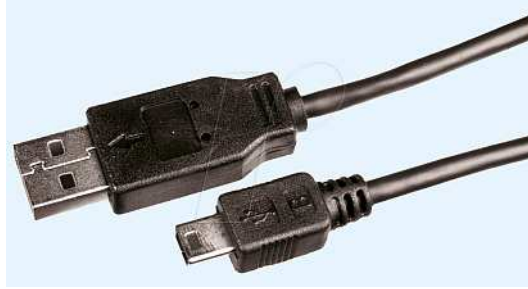
4.1 Notes concerning programming

Programming is performed by using the software *Prog4000* (part of delivery with GMT4000).



For more detailed information concerning PROG4000 please see separate document System4000-Programming-Instruction

System4000 components are to connect with PC via USB cable with Mini-B-USB-interface-connector (Art.-Nr. 9104.0162, part of delivery).



Programming software requires .NET-Framework Version 4 or higher. The Setup program will install Framework at PC if not yet present

On delivery GMT4000 and ADP4000 are configured with default settings and none text. Any customer text will be transferred with the protocol (default application) or project specific to add later.

If no customer text is given with protocol messages adequate texts can be programmed in ADP4000 and / or GMT4000 device. With GMT4000 redundant text programming should be done by ADP4000 configuration. The ADP4000 communicates with the specific CIE, completes any message with the relevant programmed text and transmits the data inclusive these texts to all devices at redundant loop.

It is recommended to store the configuration data of a project into a separate and dedicated project file to have the data set for processing without direct established connection with the ADP4000 / GMT4000 devices.

Please note :



When redundant connected (System4000) the GMT4000 will be energized via System4000 bus from ADP4000.

With System4000 programming GMT4000 can be done via USB interface at redundancy adaptor ADP4000 ! A direct connection via USB at GMT4000 is not necessary.

Please note :



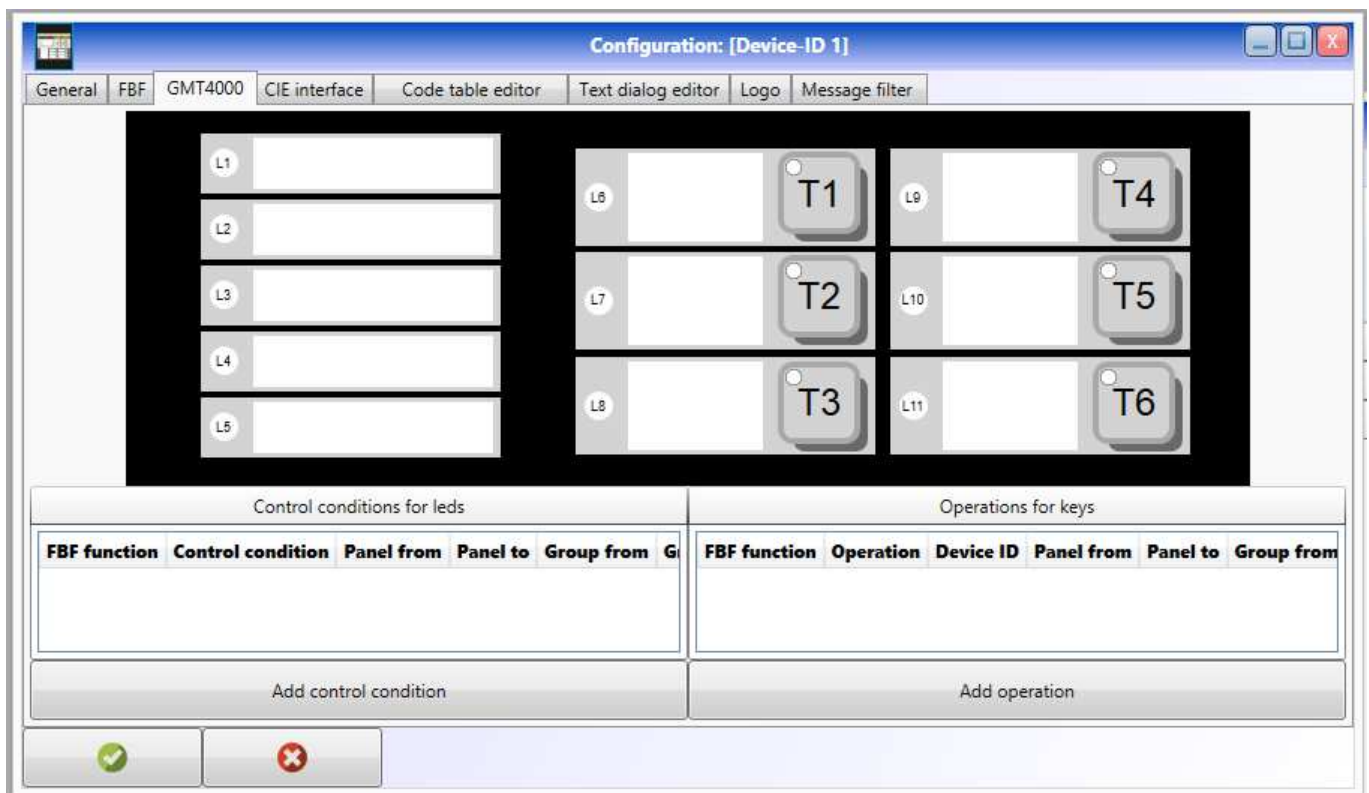
GMT4000 and ADP4000 do not enter a special programming mode !

Read / write of configuration data will be performed via USB interface. The programming tool triggers a device reset automatically when programming (write) completed.

With established USB connection to GMT4000 or ADP4000 new devices are detected by the operating system option "hardware detection". All necessary drivers are implemented in the operating system, thus no driver installation is required.

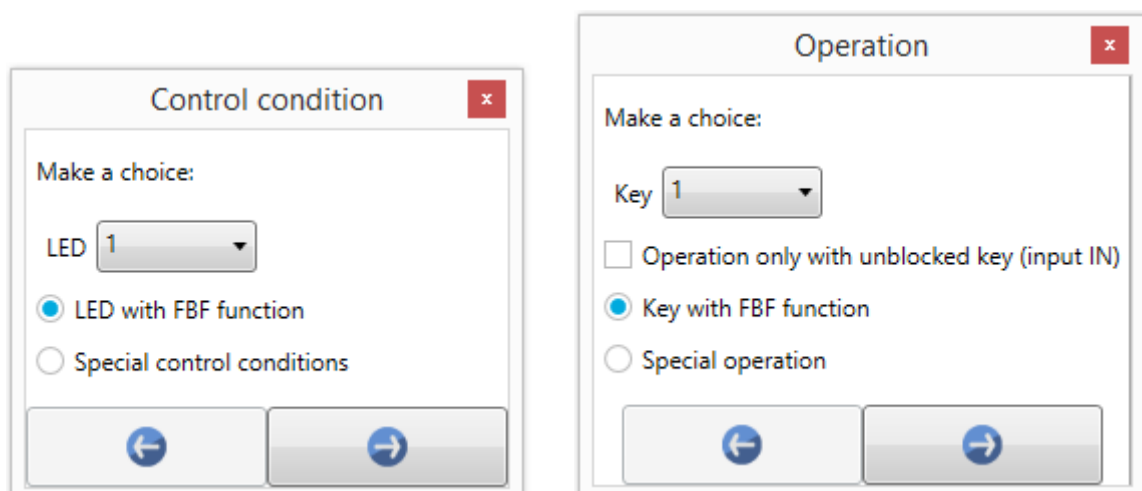
4.2 Programming

For GMT4000 specific settings enter adequate configuration dialogue.

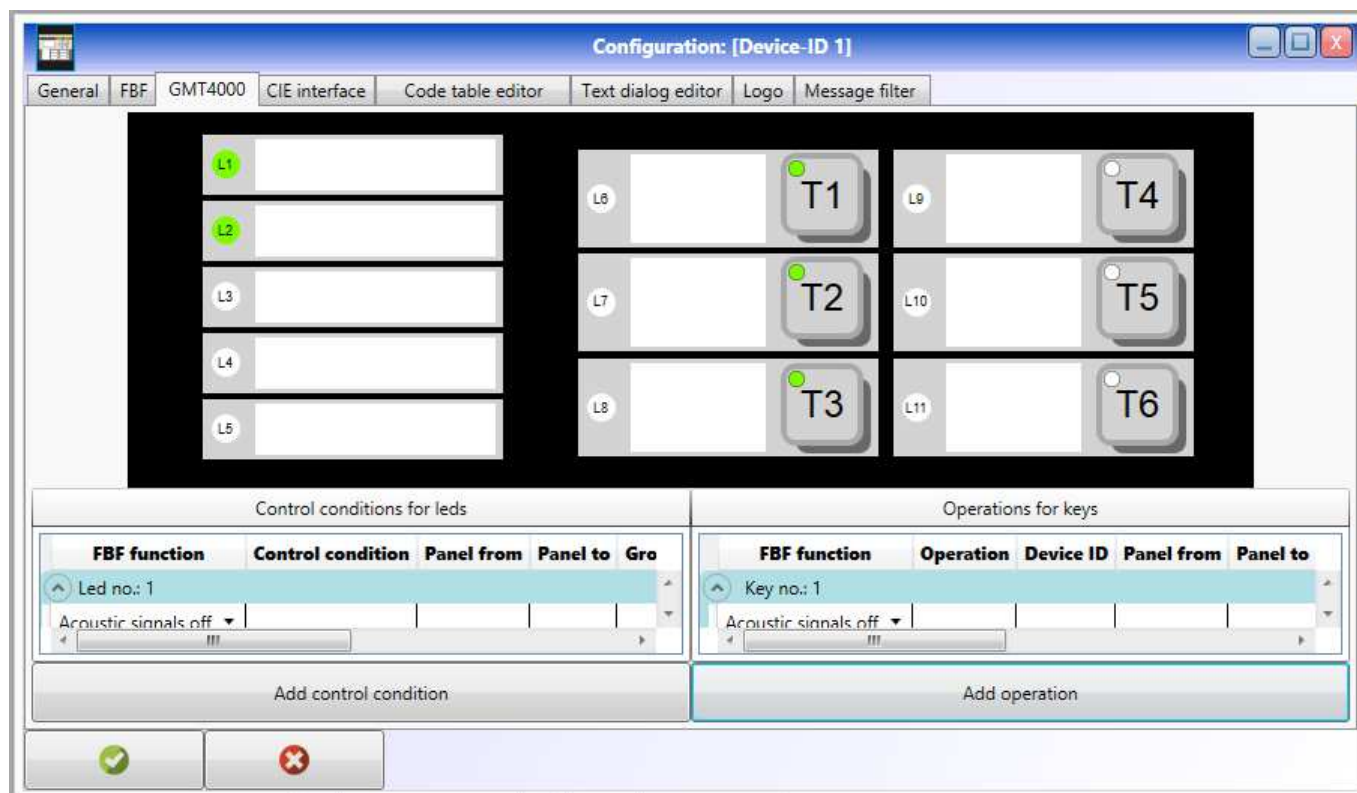


Using Tab "GMT4000" control conditions and operation functions can be defined and modified.

For defining of new control conditions or operation function a wizard function creates and configures the option.



The wizard must be completed before the new data set will be created.



Inside the upper window the visualized view of the GMT4000 to configure. The LED are marked with L1 until L11 and the keys are labelled with T1 until T6.

<u>Symbol</u>	<u>Data set created ?</u>	<u>selected ?</u>
	no	no
	yes	no
	yes	yes
	no	no
	yes	no
	yes	yes

After creating of data sets they can be modified when needed.

Please note: Any configuration will be valid for the device after data transfer into the according device.

5 Legal note

The devices ADP4000 and GMT4000 are using the operating system *picoJOS*.
Therefor the following licence conditions granted:

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This document comprises all necessary information for correct installation of GMT4000 device. The CIE specific connections / application are subject of separate documents. Qualified stuff with basic knowledge of fire detection and fire alarm systems and general electronics are assumed.

This document was prepared with the greatest care. The manufacturer reserves the right to carry out changes without separate information. A liability for any loss, injury, arising, additional expenditures and / or possible resultant damages resulting from it is excluded !

6 Technical Data

Hazard Remote Panel		GMT4000	
Type of connection to CIE		Not redundant	Redundant
Type of interfaces		RS232, RS422, RS485, TTY, ...	Redundant bus
Property with redundant connection to CIE			Adaptor module
Max. number of GMT4000 per system interface		1	ADP4000 inside the CIE
Max. length of data wires		depending on interface standard	ca. 800 m
Required connecting cables		telecommunication cable	IY(St)Y n x 2 x 0,8 mm
Power supply nominal		24 V DC	
Range of power supply		10 V DC up to 42 V DC	
Current consumption			
- quiescent current		ca. 35/21 mA @ 12/24 V DC	
- max. operating power		ca. 100/51 mA @ 12/24 V DC	
Protection class		IP 30 DIN 40050	
Ambient temperature		0 °C up to 50 °C	
Storage temperature		-10 °C up to +60 °C	
Housing		Steel plate, graphit black, RAL 9011, (surface mounting)	
Dimensions		230 x 200 x 61,5 mm (B x H x T)	
Weight		approx. 2,5 kg	
Redundancy adaptor		ADP4000	
Required connecting cables		telecommunication cable	IY(St)Y n x 2 x 0,8 mm
Power supply nominal		24 V DC	
Range of power supply		10 V DC up to 42 V DC	
Current consumption			
- quiescent current		ca. 30 mA @ 24 V DC	
- max. operating power		ca. 35 mA @ 24 V DC	
Fault relay		Closing contact (potential free)	
- Max. switching current		60 V DC/ 1 A	
Ambient temperature		0 °C up to 50 °C	
Storage temperature		-10 °C up to +60 °C	
Mounting		Inside CIE cabinet	
Dimensions		85 x 115 x 25 mm (B x H x T)	

VdS Approval

FAT4000 / ADP4000	G 213058
FBF4000	G 213057

Parameter / limits Prog4000

Connection PC ↔ GMT4000	USB interface (Mini-USB)
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Detector texts /customer texts :			Number of text to store :	
Rows :	Length of row	No. of chars	Flash 2 MB	Flash 4 MB (default)
3	20	60	5.500 Texts	19.000 Texts
2	20	40	7.500 Texts	26.000 Texts
1	20	20	11.500 Texts	40.000 Texts

7 Documents



further documents : **Application and Systeminformation !**
System4000__Application:.... (CIE specific application)
FAT4000-FBF4000 Operating-Installation
System4000 M4-Interface-Modules
Programming software Prog4000
CIE documents

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