REGARD Configuration Software

Instructions for Use

REGARD Configuration Software
certified as CUS0000
Software version: 1.0.0

REGARD Interface Card
certified as CUI0000
Software version: 01.07

Configuration and documentation of
REGARD channel cards systems

Table of Contents

Notice on REGARD Configuration Software

Safety Instructions

Strictly Follow the Instructions for Use

Any use of the PC-program requires complete understanding and strict observation of the user instructions below and other required REGARD instructions.

The program is only to be used for the purposes explicitly specified in this manual.

Safety Symbols used in these Instructions for Use

While reading this manual, you will come across a number of warnings concerning some of the risks and dangers you may face while using the device. These warnings contain "signal words" that will alert you to the degree of hazard you may encounter. These words, and the hazards they describe, are as follows:

⚠WARNING
Indicates a potentially hazardous situation which, if no safety precautions are taken, could result in death or serious injury.

⚠CAUTION
Indicates a potentially hazardous situation which, if not avoided, could result in physical injury to you, or damage to the product.
It may also be used to warn against unsafe practices.

Notice
Additional information on how to use the device.

Compatibility and Restrictions

Minimum Requirements for the PC System

Operating system:	Windows 2000, Windows XP, Windows Vista
Processor:	Intel Pentium
Working memory:	512 MB RAM
Interfaces:	REGARD Interface Card
	a free USB port

Compatible REGARD Components

Card type	Software versions	Icon
Master card/ Extra master card	V1.6, V1.7 (DMT), V1.8, V3.0 (ATEX)	
4-20 mA channel card	V1.5, V1.6, V1.7 (DMT), V3.0 (ATEX)	
4-20 mA optical card	V1.0, V3.0 (ATEX)	
Ex channel card	V1.5, V1.6, V1.7 (DMT), V3.0 (ATEX)	
8-channel display card	V2.5, V3.0 (ATEX)	
HART channel card	V1.4, V2.0	
Relay display card	V1.5, V3.0 (ATEX)	

⚠CAUTION

No other REGARD cards and software versions are supported by this software and therefore cannot be configured with this software!

Driver

❑ REGARD Interface Card Driver

The driver for the REGARD Interface card is provided on the installation CD.

Restrictions

Card type	Restriction	Icon
Master card/ Extra master card	Voting configurations of master cards regarding A3 alarms cannot be configured and read for groups consisting of more than 10! Such configurations have to be set manually or read out directly from the master card, if necessary. The software will not recognise cards configured as extra master. If necessary, the extra master card configurations must be set directly at the card and added to the documentation manually after the system was read out.	
4-20mA cards with chlorine or HF/HCl test	The LCl2, ACl2, TCl2 functions/parameters cannot be changed or read using the software. These card parameters must be configured manually and documented.	
8-channel display card/ HART channel card	The software will not automatically assign the channels of multiple channel cards to the respective display cards. If necessary, the assignment must be carried out manually after the system configuration was read out. The procedure affects those card parameters which apply to all channels of a display card. They are marked yellow in the software.	
Relay display cards	Relay display cards with CSUM communication error-detection cannot be configured using the software.	
All channel cards	It is possible to change and read out configuration parameters using the software. All settings entries, such as e.g. zero point settings must be carried out manually on the channel cards.	

Intended use

Use

The REGARD configuration software helps configure and document the REGARD channel card systems.

Benefits for the user

The REGARD configuration software enables comfortable, safe and timesaving configuration and documentation of the above mentioned REGARD channel cards.

System Requirements for the Gas Warning System

The above mentioned REGARD channel cards can be configured using the REGARD configuration software.

This software is not to be used to configure systems operating with other cards or software versions. The REGARD Interface card is used to directly connect the REGARD systems to a USB port of a computer. To carry out the connection, the REGARD Interface card must be inserted into the system.

Using the software is only possible when the REGARD system is entirely ready for communication. This means:

1. Make sure that a master card is inserted.
2. The master card must be provided with the number of channels and the start channel address of the channel cards.
3. All channels are assigned a unique card number (consecutive numbering without gaps).
4. All relay display cards have a unique card number assigned to them.
5. All relay modules have an address assigned to them.
6. The system is faultless (e.g. FLTX, FLTC, etc.)
7. The REGARD Interface card and the driver are installed.

Notices on How to Use the Instructions

Notice
This IFU must be used in combination with user manuals of the REGARD channel cards you intend to use.

Style Conventions

The following identification markings are used in IFUs:

Work step sequence:

- ...
- ...
- ...

Listings for the (completeness) check:

1. ...
2. ...
3. ...

Handling options:

a) ...
b) ...
c) ...

Listings in the text:

❑ ...
❑ ...
❑ ...

Buttons and menu items:

Selection

Help System

In addition to the operating manual enclosed with the software package, a comprehensive help system is integrated in the REGARD configuration software.

You can call up the Help function by clicking on the question mark in the menu.

All of the explanations found in the operating manual are also given in the Help.

Installing the REGARD Configuration Software

- Insert installation CD in CD/DVD-ROM drive.
- If the installation routine does not start automatically: launch setup.exe.
- Follow the installation instructions.

Result

1. The REGARD configuration software is installed automatically in the C:\Program Files\Draeger\REGARD Configuration Software directory. Any existing version in the folder will be overwritten.
2. Links to the program will be created on the Desktop and in the Start menu.

Starting the REGARD Configuration Software

You can start the REGARD configuration software in two ways:

a) by double-clicking the *REGARD configuration software icon* on the Desktop

b) by choosing the *REGARD configuration software* menu item in the Windows menu under *Start* - *Programs* - *Dräger*

- After the installation, user profiles must be created in the user administration.

The following default settings in the user administration are preconfigured:

user name: admin
password: admin

Notice
To prevent unauthorised use, the administrator password must be changed after the installation has been completed.

Working with the REGARD Configuration Software

Operating Modes

Offline Configuration Mode

The following operations can be carried out in this mode:

- ❑ setting new system configurations
- ❑ editing/changing system configurations
- ❑ opening and saving system configuration files
- ❑ printing system configurations
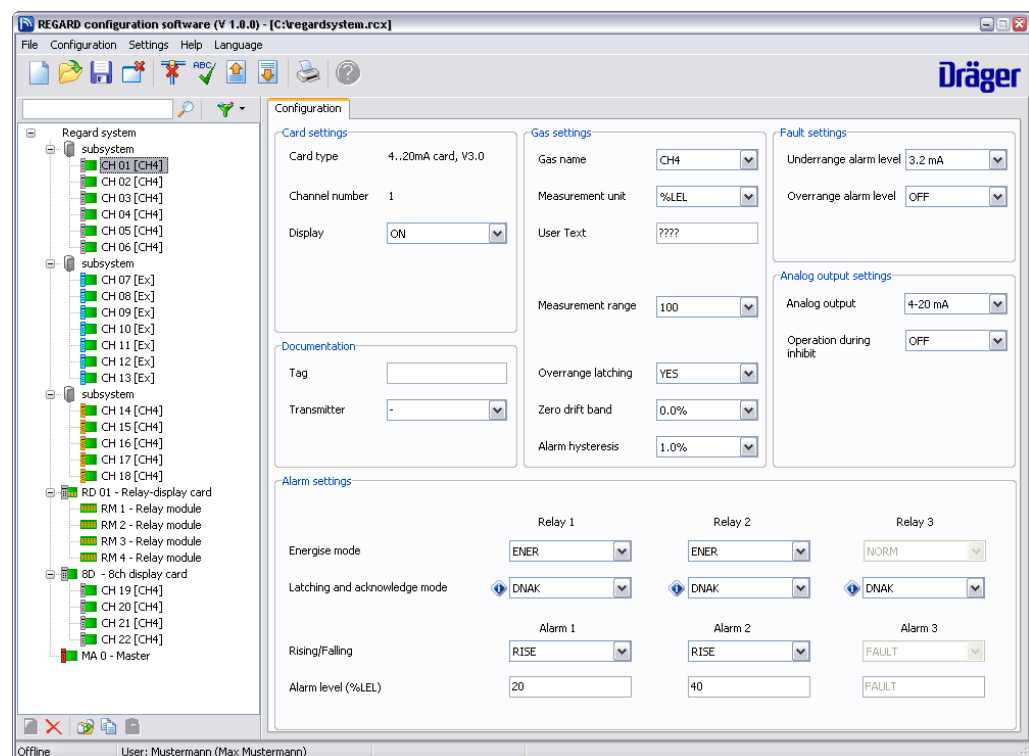
Online Configuration Mode

The following operations can be carried out in this mode:

- ❑ changing individual channel card parameters during operation
- ❑ replacing channel card configurations (replacing cards)
- ❑ sending channel cards and system commands

Configuration Window

The system configuration is displayed in the configuration window.

The system architecture is visible in a tree structure on the left side of the instrument window. By selecting the required parameter or the required card, the corresponding data is displayed on the right side and can also be changed here if needed. Values shown in grey cannot be changed.

Conformance of the Parameter Description

In the configuration software, a consistent designation of all card parameter settings was used. However, the designations in the operating manual and on the displays of the REGARD components may be different. In particular:

Card type	Card designation	Designation in software
8-channel display card/ HART channel card	ON ALARM	ENER
	NORMALLY	NORM

Creating System Configurations

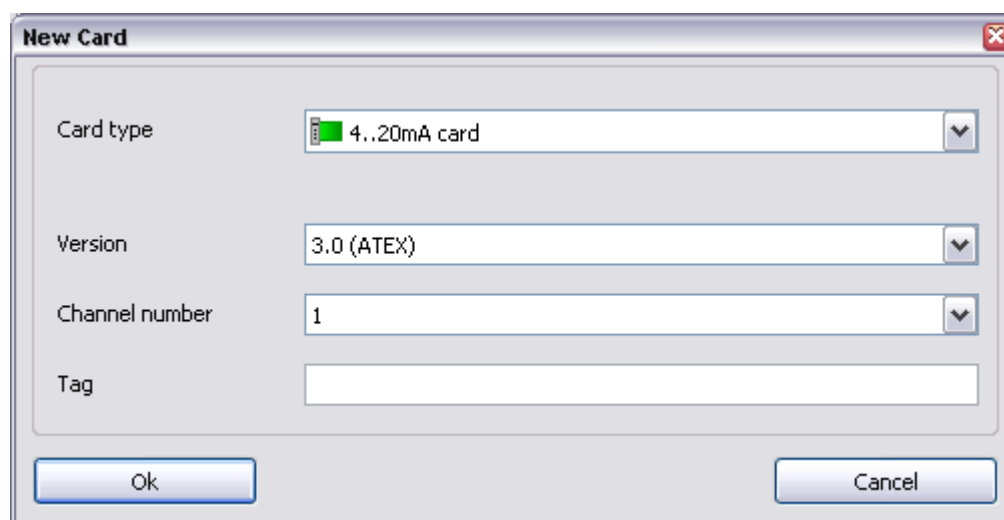- New system configurations can be created using either a menu or a button:

a) Select *New* in the *File* menu.

b) Press [ ] button.

Creating New Cards and Channels

The user can create new cards and directories.

- Select a master element (system, subsystem, relay, display, HART or 8-channel card).
- Create a new card/channel using either a menu or a button:

    a) Select *New* in the context menu.

    b) Press [ ] button.

- Choose card type or subsystem.
- If possible, select software version of the channel card.
- If possible, select channel number.
- Enter a description if necessary.
- Confirm dialog with OK.

Deleting System Elements

- Choose the element to be deleted (e.g. channel or subsystem).
- Delete the element using either a menu or a button:

    a) Select *Delete* in the context menu.

    b) Press ✕ button

Notice
All subelements will also be deleted.

Duplicating System Elements

Cards and channels can be duplicated. The newly-created channels are automatically provided with available channel numbers.

- Choose the element to be duplicated (e.g. channel or subsystem).
- Duplicate the element using either a menu or a button:
  a) Select *Duplicate* in the context menu.
  b) Press 🗗 button.

Copying Channel Configurations

The configurations can be copied from one channel to another.

Only channels or cards of the same type can be copied.

It is not possible to copy a Non-ATEX version configuration to an ATEX version.

- Choose the element from which the configuration should be copied.
- Copy the element using either a menu or a button:
  a) Select *Copy settings* in the context menu.
  b) Press 📑 button.

- Choose a different element of the same type.
- Paste the element using either a menu or a button:
  a) Select *Paste settings* in the context menu.
  b) Press 📋 button.

Changing Parameters

All adjustable parameters of a channel card are displayed on the right. Cards can be selected in the system structure on the left. Values shown in grey cannot be changed.

For further information on individual parameters refer to the user manual of the respective channel card.

Notice
Voting configurations of master cards regarding A3 alarms cannot be configured and imported for groups consisting of more than 10 items! They have to be set directly on the master card if necessary.

Notice
Some parameters of the multiple channel cards HART and 8-channel cards apply to all card channels. Any change will influence all channels i.e. the entire card. These parameters are marked yellow!

Notice
Information considering designation (TAG), transmitter and sensor current values are relevant for the documentation only and have no influence on the card configuration.

Notice
After the transmission, configuration changes of the relay display cards or modules cannot be reset. This is because contrary to channel cards, relay display cards have an auto-save function which is triggered after transmission. This ensures that all parameters are permanently changed after transmission.

System Structure and Documentation

Comments on the system configuration e.g. notices on certain system properties can be entered in the system dialog.

Channels or cards can be moved by Drag&Drop within the system window and sorted into subsystems or rack. They can also be nested within each other to enable a depiction of complex systems.

Notice
These system designations are only relevant for the documentation in the configuration file and will not influence the system configuration.

For documentation purposes, a transmitter for each channel card can be selected or entered in the parameter view of channels or cards. In case of EX cards the sensor current can be documented. Each channel can be provided with a description (TAG). These entries will not influence the settings on the channel card.

Search and Filter Functions

The software is provided with functions enabling the user to search the data for descriptions and filter it according to a channel or a card type.

Search

- Enter a search item into the search field.
- Start search using a button.
- Use a button to continue searching until the required element is found.

Filter

- Select a card or a channel type using a button.

The remaining card or channel types are faded out.

Data Transfer between the REGARD Systems and the REGARD Configuration Software

⚠WARNING
❑ Observe the information in the REGARD instructions.
❑ Accessing the system can cause communication errors.
❑ During the access procedure, the system will be fully or partially set to service mode (Inhibit).
❑ Access is only possible when the system is entirely ready for communication!
❑ Voting configurations of master cards regarding A3 alarms cannot be configured and imported for groups consisting of more than 10 items! They have to be set directly on the master card if necessary.
❑ Only one REGARD Interface card may be connected.
❑ During the access procedure a part of the MEASURE messages at the system bus (Modbus cards etc.) is blanked. This can influence the performance of the Vision32 software.
❑ During the access no manual changes may be carried out at the system.
❑ The system may only be accessed using the software. After the system was configured or the configuration transfer was completed, the connection between the REGARD Interface card and the PC must be disconnected.

The user must confirm system access procedures, e.g. Read, Write and Online Mode using a password.

Reading Out the REGARD System Configuration

- Power up the system.
- Connect the REGARD Interface card to the PC using the supplied USB cable.
- Start the REGARD configuration software.
- To read out the REGARD system configuration,
  a) Select *Receive from system* in the *Configuration* menu.
- b) press ⬇ button.
- Confirm system access using a password.
- Save the system configuration as a file.

  If the transferred REGARD system contains multiple channel cards (HART or 8-channel display cards), the respective channels must be arranged into groups. To do so, the multiple channel cards can be added to the system configuration and the channels can be sorted using the Drag&Drop function. This operation must be carried out very carefully, because an incorrect arrangement could distort the configuration.

Transferring the Configuration to the REGARD System

- Power up the REGARD system.

- Connect the REGARD Interface card to the PC using the supplied USB cable.
- Start the REGARD configuration software.
- Create or load configuration.
- If necessary, save the system configuration as a file.
- Transfer the configuration to the system, use either the menu or the button
   a) Select **Send to system** in the **Configuration** menu.

b) Press button.

- Confirm system access using a password.
- After the transfer, the data is read back and must be checked for correctness. All parameters are listed as tables in a compare dialog.
- Confirm data verification and permanently save the configuration.
   or
- The system can be set to its previous state using the **Reset** button, if necessary. The procedure does not apply to the configuration data of the relay display card or modules which must be, if necessary, reset manually.

Result

The parameters from the REGARD configuration software are transferred to the system, previous system settings are overwritten.

System Comparison

It is possible to compare the current system configuration with a saved system configuration. The differences are displayed in tables in a dialog.

- Power up the REGARD System.
- Connect the REGARD Interface card to the PC using the supplied USB cable.
- Start the REGARD configuration software.
- Load the saved configuration.
- Start system comparison using the ✔ button.
- Confirm system access using a password.
- Carry out a system comparison assessment.

In the comparison view the user can filter the data according to differences and card types.

The result of the comparison can be printed out using the Print button.

Working in Online Mode

Starting the Online Mode

In Online mode the software displays the current system and enables configuration changes for each channel individually.

- Power up the system.
- Connect the REGARD Interface card to the PC using the supplied USB cable.
- Start the REGARD configuration software.
- Start Online mode using   button.
- Confirm system access using a password.

The Online mode can be closed using the   button.

Changing Individual Channel Configurations

- Select a channel from the tree structure on the left side of the screen.
- Change parameters.
- Transfer the change to the channel card using the   button.
  The configuration is transferred to the channel card and - for safety reasons - automatically read back.
- After the transfer was completed, check if the parameters have been transferred and read back correctly.
- Confirm data verification and permanently save the configuration using the   button.

or

Use the   button to reset parameters that were changed but not transferred or permanently saved yet.

The procedure does not apply to the configuration data transferred to the relay display card or modules. These must be reset manually to the previous condition.

Replacing Channel Configurations

A complete parametrization of a card can be carried out using the saved configuration. This can be advantageous e.g. after exchanging or replacing a card.

- Start Online mode.
- Select a channel from the tree structure.
- Load a channel configuration from a file using the **Replace configuration** menu.
- Select configuration file.
- Select and accept channel.

- Transfer the change to the channel card parameter using the ⬆ button.
  The configuration is transferred to the channel card and - for safety reasons - automatically read back.

- After the transfer was completed, check if the parameters have been transferred and read back correctly.

- Confirm data verification and permanently save the configuration using the ⊘ button.
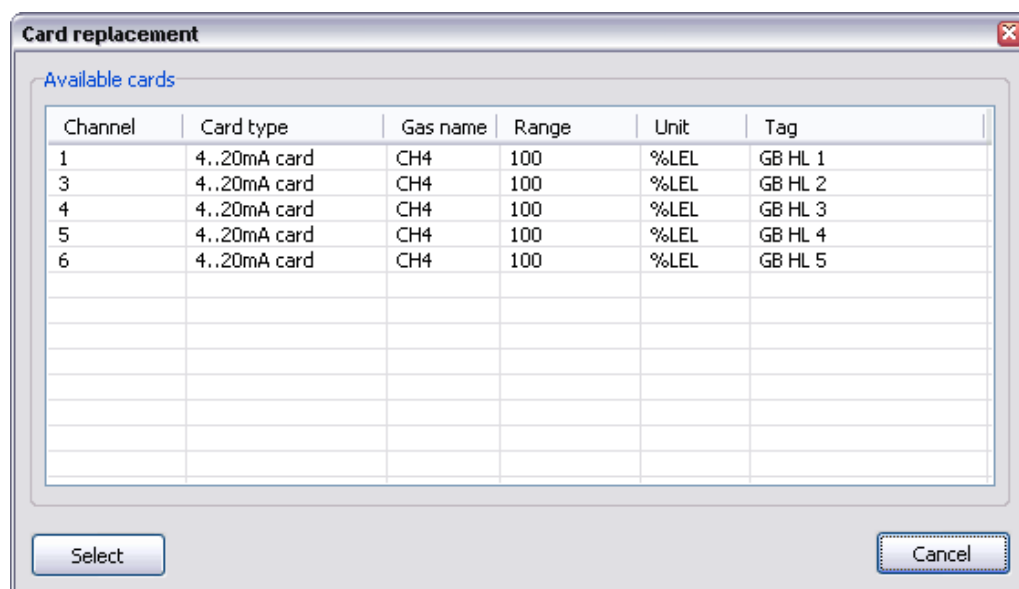
or

Use the 🔄 button to reset parameters that were changed but not transferred or permanently saved yet.

The procedure does not apply to the configuration data transferred to the relay display card or modules which - if necessary - must be reset manually.

The configurations of multiple channel cards / relay modules must be exchanged for each channel/module individually.

Channel	Card type	Gas name	Range	Unit	Tag
1	4..20mA card	CH4	100	%LEL	GB HL 1
3	4..20mA card	CH4	100	%LEL	GB HL 2
4	4..20mA card	CH4	100	%LEL	GB HL 3
5	4..20mA card	CH4	100	%LEL	GB HL 4
6	4..20mA card	CH4	100	%LEL	GB HL 5

Card replacement — Available cards — Select — Cancel

Sending Commands

The following commands can be sent to all channels in the REGARD system or to each channel individually:

- ❑ Acknowledge.
- ❑ Set inhibit mode.
- ❑ Inhibit LOCK (60-0).
- ❑ Leave inhibit mode.
- ❑ Test LEDs (14-0).
- ❑ Leave Test LEDs.
- ❑ Only for HART channels: Transfer (04-7.

Notice

> Commands sent to the system are ignored by the master cards.
> Commands must always be sent directly to the master cards.

- Start Online mode.
- Select a channel or system from the tree structure.
- Send command using either a menu or a button.
    a) Select *Command* in the menu.

b) Press ![button] button.

Printing the System Configurations

For documentation purposes, the system configurations can be printed out.

🖨️	***Print*** When the configuration files are opened, the ***Print*** button is active and the system configurations can be printed.

Creating a User Account

A user account must be created for each software user.

User administration

The following information must (*) or can be entered:
- ❑ User name *
- ❑ First name
- ❑ Last name
- ❑ Password *

Each user can be assigned different rights:
- ❑ Receive (Read out system/configuration)
- ❑ Send (system/configuration)
- ❑ Edit configurations
- ❑ Online Mode

Only the administrator can manage user accounts.

The following information can be entered or changed in the "Administrator" user account:

❑ First name
❑ Last name
❑ Password

Notice
To save any changes of user data or user rights, a new password must be assigned.

Menu

The menu of the REGARD configuration software is located in the program window header. Frequently used functions are also available as buttons in a button bar.

Some of these buttons are adaptive, hence are active only when corresponding functions are available.

File Menu

	Logout The current user is logged out. The login dialog is displayed.

	New Creates a new system configuration.

	Open Calls up a configuration selection window. Select the required file and press the ***Open*** button.

	Close Closes the opened system configuration. If any opened configurations contain changes that have not yet been saved, the user is asked if the data should be saved before the window closes.

	Save The opened system configuration is saved. ***Save as*** Enables saving system configurations with a different file name.

	Print The system configuration is printed by the selected printer.

	Exit
	Exits the REGARD configuration software.
	If any opened configurations contain changes that have not yet been saved, the user is asked if the data should be saved before the window closes.

Settings Menu

	User administration
	The user administration dialog is opened.
	This function is available only to the administrator.

	Printer Settings
	Opens the printer settings dialog.

Configuration Menu

	Compare
	The opened system configuration is compared with the configuration of the connected REGARD system.

	Send to system
	The currently opened system configuration is loaded to the connected REGARD system.

	Receive from system
	The configuration is read out from the connected REGARD system.

	Online mode
	Starts the Online mode.

Help Menu

	About Opens a dialog containing program information.

	Contents Opens the Help file.

Language Menu

The Languages menu contains all selectable languages.
To change the program language, select required item.

Error list

Error Message	Context/Meaning	Cause	Action / Remedy
The REGARD Interface card was not detected. Please check the connection.	Communication with the system was started.	Connection with the card is disturbed.	Check the USB connection. Check the LEDs on the card.
The verification of the read back configuration values failed! Correct the configuration on the card manually.	Configuration parameter transfer.	A discrepancy/ implausibility of parameters was detected.	Interrupt the configuration. Restart the configuration. Reset card manually. Card may be defective.
Configurations cannot be compared. The system contains different number of cards.	Comparison of system configuration.	There are too many differences between the amount of the cards/channels or their structure to compare the configuration file and the current system configuration.	Checking the configuration. Updating configuration file.
Configurations cannot be compared. At least one card has a different software version.	Comparison of system configuration.	There are too many differences between the amount of the cards/channels or their structure to compare the configuration file and the current system configuration.	Checking the configuration. Updating configuration file.
Invalid configuration file!	Load from a file.	An invalid configuration file was attempted to be loaded.	The file is invalid or was manipulated. Create new file if necessary.
File could not be created. System configuration data is defective!	Saving the configurations.	An unknown error occurred.	Restart the program. The computer memory may be defective.
A critical error occurred. Please make sure that the REGARD Interface card is connected correctly.	Communication with the system was started.	Connection with the card is disturbed.	Restart the application. Check the system configuration if necessary Check the USB connection. Check the LEDs on the card.

Error Message	Context/Meaning	Cause	Action / Remedy
A communication error occurred during the start of the Online mode. Please make sure that the REGARD system and the REGARD Interface card are connected correctly.	Configuration parameter transfer.	The connection with the card or the system is disturbed.	Check the USB connection. Check the LEDs on the card. Check the system configuration if necessary
Configuration of at least one of the cards is invalid. Please, correct the settings.		Configuration of at least one of the cards is invalid.	Check the configuration for invalid values and adjust if necessary.
A communication error occurred. Check the system configuration manually.	Communication with the system.	The connection with the card or the system is disturbed.	Check the USB connection. Check the LEDs on the card. Check the system configuration if necessary

REGARD Interface Card

For Your Safety

Follow the instructions

Follow the instructions for installation, operation and maintenance. Any use of the device requires full understanding and strict observation of these instructions. The device may only be used for the purposes specified here.

Not for use in potentially explosive atmospheres.

The REGARD Interface card is not approved for operating underground or in potentially explosive atmospheres.

Maintenance

The REGARD Interface card does not require any maintenance but should be checked at regular intervals for correct operation.

For the USB connection between the REGARD Interface card and the PC, the cable used should not be longer than 3m.

Safety instructions

Strictly follow the instructions for use

Any use of the REGARD Interface card requires complete understanding and strict observation of the user instructions below and other required REGARD instructions.

The REGARD Interface card is only to be used for the purposes specified herein.

Safety symbols used in these Instructions for Use

While reading this manual, you will come across a number of warnings concerning some of the risks and dangers you may face while using the device. These warnings contain "signal words" that will alert you to the degree of hazard you may encounter. These words, and the hazards they describe, are as follows:

⚠WARNING
Indicates a potentially hazardous situation which, if no safety precautions are taken, could result in death or serious injury.

Notice
Additional information on how to use the device.

CE marking and ATEX marking

The REGARD Interface card is provided with a CE marking indicating its conformity with the "ATEX" Directive 94/9/EC as accessory of the REGARD system.
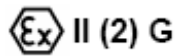
In addition, the card carries the following marking in accordance with the directive:

⟨Ex⟩ II (2) G

EC-Type Examination Certificate DMT 02 ATEX G 002 X

⚠WARNING
This marking does not mean that the card is explosion-proof.
Without suitable protection, the REGARD Interface cards may not be used in potentially explosive atmospheres (hazardous areas).

However, this applies only if ATEX versions of the REGARD channel cards with software version 3.0 (see chapter "Compatibility") are used.

Designation

The date of manufacture is encoded in the serial number.

The year of manufacture is indicated by the third letter in the serial number shown on the rating plate: T = 2003, U = 2004, W = 2005, X = 2006, Y = 2007, Z = 2008, A = 2009, B = 2010, C = 2011, etc.

Example: Serial No. ARUH-0054: the third letter is U, which means that the unit was manufactured in 2004.

Declaration of Conformity

Dräger

Konformitätserklärung
Declaration of Conformity

Wir / We   Dräger Safety AG & Co. KGaA
Revalstraße 1
D-23560 Lübeck
Deutschland / Germany

erklären, dass das Produkt / declare that the product

**Schnittstellenkarte Typ CUI 0000
(REGARD Interface Card)**
**Interface Card type CUI 0000
(REGARD Interface Card)**

in Verbindung mit der Gaswarnzentrale Typ REGARD gemäß den Bestimmungen der Richtlinie 94/9/EG (Geräte und Schutzsysteme zur bestimmungsgemäßen Verwendung in explosionsgefährdeten Bereichen) übereinstimmt mit dem Baumuster der EG-Baumusterprüfbescheinigung

in combination with control unit type REGARD following the provisions of Directive 94/9/EC (Equipment and protective systems intended for use in potentially explosive atmospheres) is in conformity with the type of the EC-type-examination certificate

DMT 02 ATEX G 002X

für / for   Gerätegruppe und -kategorie / Equipment Group and Category: **II (2)G**

ausgestellt von der benannten Stelle / issued by the notified body

DEKRA EXAM GmbH
Dinnendahlstraße 9
D-44809 Bochum
Kennnummer / identification number 0158.

Das Produkt wurde unter einem Qualitätssicherungssystem hergestellt, endabgenommen und geprüft, das zugelassen wurde von der benannten Stelle

The product has been manufactured, finally inspected and tested under a quality system which has been approved by the notified body

DEKRA EXAM GmbH
Dinnendahlstraße 9
D-44809 Bochum
Kennnummer / identification number 0158.

Ralf Baginski

Ralf Baginski
Vice President   Lübeck, 29.05.2009
Dräger Safety AG & Co. KGaA

Dokument-Nr. / document no.: SE20709 "00"
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Intended Use

The REGARD Interface card is designed for the REGARD channel card systems and must be used with the REGARD configuration software only. The REGARD Interface card can stay permanently inserted in the rack, but the USB cable is only allowed to be connected to the software during the configuration procedure.

Indication of Operational and Fault Conditions

After the PC and the REGARD Interface card have been connected via USB connector, the power up procedure and the card self-test are initiated. During these procedures the Fault and the Comm LEDs light up automatically. If the system voltage supply is connected, the Power LED lights up as well.

The interface is ready for communication after approx. 3 seconds.

Notice
During the power up procedure all messages are ignored.

LED	Colour	Indicates
Power	green	Lit: The card is correctly connected with the REGARD system and is supplied with voltage from the system.
Fault	yellow	Flashing: Operational disturbance or card error. Disconnect the USB connection and then reconnect it. In case of permanent error message: The card is defective and must be replaced.
Comm	green	Lit: USB connection without communication Flashing: System <-> PC communication Unlit: Check USB cable. Check the USB voltage supply. In case of permanent error message: The card is defective and must be replaced.

Installation

Install the REGARD configuration software incl. driver, before installing the channel card.

Insert the card into the slot of the REGARD rack, just like the other REGARD channel cards. The rack requires no other cabling.

Notice
Observe the REGARD manuals for channel cards.

Specifications

Operation and Storage

DC supply system	
Voltage range	18 – 30V DC
Current consumption at 24V	maximum 90mA

DC supply on the USB side	
Voltage range	5V DC (USB supply) -1V + 0.25V
Current consumption at 5V	maximum 90mA

Operating conditions	
Temperature	0 to 55°C
Humidity	0 to 90% RH, non-condensing
Vibration	according to EN 60079-29-1
USB cable	The used USB connecting cables should not be longer than 3m.

Storage conditions	
Temperature	–25 to 55 °C

Weights	
REGARD Interface Card	105 g

Disposal

Since August 2005, regulations concerning the disposal of electrical and electronic devices have been implemented throughout the entire European Union; these regulations are specified in the Directive 2002/96/EC of the European Parliament and in national laws relating to this device.

Special collection and recycling possibilities have been established for private households. However, since the device has not been registered for use in private households, it cannot be disposed of as special household waste. Therefore, you should send it to your national Dräger distribution organisation for disposal, which you can contact for further information.

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