Eijkelkamp
Soil & Water

Global Data Transmitter Multiple, Single & Single Prime
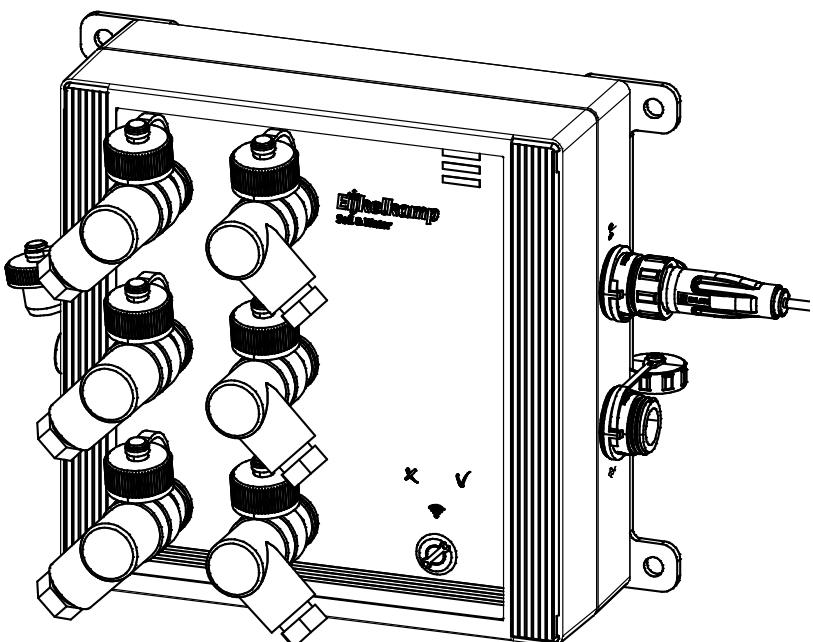
Global Data Transmitter Multiple
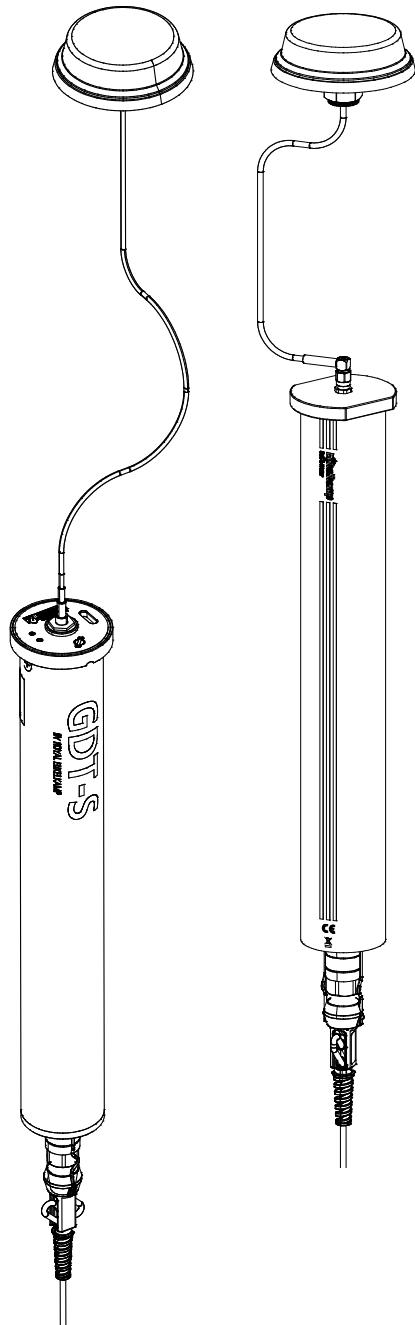
Global Data Transmitter Single
Global Data Transmitter Single Prime

Meet the difference

Contents

1 Introduction

1.1 About this manual

This supplement is an addition to the User manual. Make sure that you have read and understood the User manual. The e-mail functionality is meant for advanced users of the modem. It is only necessary to read this supplement if you have chosen for the option of using the e-mail functionality to communicate with the modem. If you have not chosen for the e-mail functionality, refer to the online manual on the Eijkelkamp Web Portal.

1.2 Working principle

Through the e-mail functionality, the user can communicate with the modem via e-mail. This way the user can send e-mail messages to the GDT Server and the GDT Server can send e-mail messages to the user's e-mail address.

1.2.1 Communication from the modem to the user

The GDT Server collects the measurement data from the modem at the wake-up interval of the modem and sends the e-mail with attachment to the user. The following table shows at which event an e-mail is send and the content of the message and/or attachment. Furthermore, reference is made to the chapters in which more detail is given about the specific event.

Event	Message content	Refer to
At every send interval	Measurement data	2.1.1
If settings in the modem are changed (at a wake-up interval)	Settings status, Measurement data	2.1.1
In the event of an error	Error message	2.1.3
In the event of an alarm (e.g. high water level or low water level)	Sensor alarm, Measurement data	2.1.2

1.2.2 Communication from the user to the modem

The user communicates to the modem by sending an e-mail with a request to the GDT Server. The following table shows the possible requests. Furthermore, reference is made to the chapters in which more detail or examples are given about the specific event.

Request	Refer to
Change the modem settings	2.2.1 & 2.2.3
Change the sensor settings	2.2.1 & 2.2.3
Receive an extra e-mail containing measurement data outside the regular send interval	2.2.4
Receive a Change history list (information about the history of changes)	2.2.4
Reset modem	2.2.4
Shutdown	2.2.4

1.3 Basic requirements

The basic requirements for the e-mail functionality are:
- Modem with configured e-mail account and settings for e-mail communication;
- E-mail program;
- User e-mail account(s);
- Internet access

2 Communication

2.1 Communication from the modem to the user

2.1.1 Data messages at send intervals

The modem will send a data message e-mail at every send interval. This data message e-mail includes the information of the modem and its connected sensors in its message field. The measurement data is enclosed as an attachment to the data message e-mail. There are 2 possible attachment formats, depending on which software you use to read out the measurement data. The following table shows the possible attachment formats. If an SDI-12 sensor is connected the attachment is in only in the format CSV.

Format	Explanation (abbrevation)	Explanation (required software)
MON	MONitor description	File extension that can be read by Diver Office
CSV	Comma-Separated Value	File extension that can be read in MS Excel

Table 1 Example of a Data message e-mail

From:	noreply@eijkelkampcarefree.com
To:	E-mailaddress-1@yourcompany.com
CC:	
Subject:	30000 24(Send interval)
Message text:	Explanation of the codes
[WellModemStatus] ModemSerialNumber=30000 ModemSoftwareVersion=3.1.0 ModemHardwareVersion=3 ReasonReport=5: Send Interval OfflineDuration=0 seconds SignalStrength=-75 dBm Temperature=25.7 degC BatteryCapacity=99% BatteryCapacityAlarm=20% BatteryCapacityPort1=96% DateTimeSend=17-09-2010 14:30:55	ReasonReport: 0 - adjustment carried out by remote control 1 - adjustment carried out locally 2 - RTC synchronisation 3 - New sensor detected 4 - Wake-up interval 5 - Send interval 6 - Alarm situation changed
[WellModemSettings] ModemLocation=Giesbeek GpsCoordinates=52.189583, 5.295244 WakeUpInterval=300 seconds DoNotWakeUpBelow=0 degC SkipMaxWakeUp=5 wakeup intervals RtcSynchEnable=1 RtcSynchInterval=1 days DayLightSaving=1 TimeZone=Europe/Amsterdam SMSAlertLanguage=NL NtpServer1=nl.pool.ntp.org NtpServer2= NtpServer3= Redundancy=1 send intervals	

[WellModemEmailSettings] EmailAddress1=E-mailaddress-1@yourcompany.com EmailAddress2= EmailAddress3= EmailAddress4=	
[WellModemTelephoneSettings] DestinationNumber1=31612345678 DestinationNumber2= DestinationNumber3= DestinationNumber4=	
[WellModemAttachmentSettings] AttachmentType=MON ConvertToAbsoluteValue=1 ExportAsMiniDiver=0 CSVIncludeHeader=1 CSVDeactivatedChannels=1 CSVSeparator=0 CSVDecimal=1	CSVSeperator: • 0 = ; • 1 = TAB CSVDecimal: • 0 = , • 1 = .
[LoggerSettingsPort1] LoggerTypePort1=0 SerialNumberPort1=.N04-G5787 317. InstrumentNumberPort1= LocationPort1=ctd-Diver OffsetPort1=0.0 CMH2O AltitudePort1=0 m InternalCompensationPort1=0 AverageMeasurementPort1=0	Possible logger (= sensor) types 0 - Diver 1 - internally compensated Diver 2 - e+ sensor 5 - internal baro
[DataSettingsPort1] FileNamePort1=none NrOfLoggingsPort1=0 StartDateTimePort1=none SampleIntervalPort1=1 minutes SendIntervalPort1=15 minutes SendStartPort1=08:00	
[ChannelSettingsPort1Channel1] ActivatedPort1Channel1=1 IdentificationPort1Channel1=PRESSURE MinimalValuePort1Channel1=400.0 CMH2O MaximumValuePort1Channel1=2150.0 CMH2O UnitPort1Channel1=CMH2O	
[AlarmSettingsPort1Channel1] AlarmHighPort1Channel1=n.a. HystHighPort1Channel1=n.a. HystLowPort1Channel1=n.a. AlarmLowPort1Channel1=n.a. FluctAlarmPort1Channel1=n.a.	
[AlarmStatesPort1] AlarmStateValuePort1Channel1=0 AlarmStateDescriptionPort1Channel1=No Alarm AlarmStateValuePort1Channel2=0 AlarmStateDescriptionPort1Channel2=No Alarm AlarmStateValuePort1Channel3=0 AlarmStateDescriptionPort1Channel3=No Alarm	Possible alarm values 0 - no alarm 1 - fluctuating alarm 2 - low alarm 3 - low, fluctuating alarm 4 - high alarm 5 - high, fluctuating alarm

[LoggerSettingsPort3] LoggerTypePort3=2 SerialNumberPort3=.N00-R0440 353. InstrumentNumberPort3=EAE#323966-R0440 LocationPort3=Nijverheidsstraat OffsetPort3=0.0 % AltitudePort3=0 m InternalCompensationPort3=0 AverageMeasurementPort3=0	
[DataSettingsPort3] FileNamePort1=n.a. NrOfLoggingsPort3=0 StartDateTimePort1=n.a. SampleIntervalPort3=300 seconds SendIntervalPort3=1800 seconds SendStartPort1=08:32	
[ChannelSettingsPort3Channel1] ActivatedPort3Channel1=1 IdentificationPort3Channel1=Moisture MinimalValuePort3Channel1=0.0 % MaximumValuePort3Channel1=100.0 % UnitPort3Channel1=%	
[AlarmSettingsPort3Channel1] AlarmHighPort3Channel1=5.0 % HystHighPort3Channel1=4.0 % HystLowPort3Channel1=3.0 % AlarmLowPort3Channel1=2.0 % FluctAlarmPort3Channel1=100.0 %	
[ChannelSettingsPort3Channel2] ActivatedPort3Channel2=1 IdentificationPort3Channel2=Conductivity MinimalValuePort3Channel2=0.00 mS/cm MaximumValuePort3Channel2=5.00 mS/cm UnitPort3Channel2=mS/cm	
[AlarmSettingsPort3Channel2] AlarmHighPort3Channel2=5.00 mS/cm HystHighPort3Channel2=5.00 mS/cm HystLowPort3Channel2=0.00 mS/cm AlarmLowPort3Channel2=0.00 mS/cm FluctAlarmPort3Channel2=5.00 mS/cm	
[ChannelSettingsPort3Channel3] ActivatedPort3Channel3=1 IdentificationPort3Channel3=Temperature MinimalValuePort3Channel3=-20.0 degC MaximumValuePort3Channel3=80.0 degC UnitPort3Channel3=degC	
[AlarmSettingsPort3Channel3] AlarmHighPort3Channel3=80.0 degC HystHighPort3Channel3=80.0 degC HystLowPort3Channel3=-20.0 degC AlarmLowPort3Channel3=-20.0 degC FluctAlarmPort3Channel3=100.0 degC	

[AlarmStatesPort3] AlarmStateValuePort3Channel1=4 AlarmStateDescriptionPort3Channel1=High Alarm AlarmStateValuePort3Channel2=0 AlarmStateDescriptionPort3Channel2=No Alarm AlarmStateValuePort3Channel3=0 AlarmStateDescriptionPort3Channel3=No Alarm	
[ModemAlarmStatus] Configuration1=Disabled Configuration2=Disabled Configuration3=Disabled Configuration4=Disabled Configuration5=Disabled Configuration6=Disabled Configuration7=Disabled Configuration8=Disabled	possible Alarm messages, single or combinations separated by ; Alarm present No Alarm Error Disabled

2.1.2   Alarm messages

In the event of an alarm (e.g. at high or low water level):
- A status e-mail is sent directly;
- The alarm will be sent with a 'normal' status mail including data.
- A text message (SMS) is sent directly (optionally, see Description of DestinationNumber in 2.2.1)

2.1.3   Error messages

In the event of an error:
- An error message e-mail is sent directly;
- The error message is shown in the subject line of the error message e-mail;
- The error message e-mail is sent only once per specific error.
- A text message (SMS) is sent directly (optionally, see Description of DestinationNumber in 2.2.1)

List of possible error messages:
- Battery low modem detected
- Battery low sensor detected
- Sensor Communication Error
- Disabled Sensor because it stopped due to an unknown reason
- Disabled Sensor because of critical battery capacity
- Couldn't connect to the POP3 server

Table 2 Example of an Error message e-mail

From:	noreply@eijkelkampcarefree.com
To:	E-mailaddress-1@yourcompany.com
CC:	
Subject:	34400 80(Logger Communication Error)
Message text:	Explanation of the codes
[ModemStatus] ModemSerialNumber=34400 ModemSoftwareVersion=3.1.0 ModemHardwareVersion=3 ModemLocation=Eijkelkamp Giesbeek ModemLocation=52.189583, 5.295244 ErrorOccurred=16: Disabled Sensor because of critical battery capacity ErrorPort=1 SignalStrength=-77 dBm Temperature=26.3 degC BatteryCapacity=99% DateTimeSend=17-01-2013 15:55:20	ErrorOccurred: 8 - Battery low sensor detected 8 - Battery low modem detected 10 - Sensor Communication Error 14 - RTC synchronisation failed 15 - Disabled Sensor because it stopped due to an unknown reason 16 - Disabled Sensor because of critical battery capacity 17 - Couldn't connect to the POP3 server 18 - Modem did not log in for the number of wake-up intervals

⚠ **CAUTION**
If the error is not solved, every successive status e-mail will display the word 'Warning' in the e-mail text. Refer to 2.1.4.

2.1.4   Warning messages

If the error is not solved, every successive e-mail will display the word 'Warning' in the e-mail text.
List of possible warning messages:
- WARNING: The external sensor isn't responding, unable to send log data!
- WARNING: Modem battery capacity critical, service needed!
- WARNING: Modem battery capacity low, service needed!
- WARNING: Battery capacity critical on port 1, service needed!
- WARNING: Battery capacity low on port 1, service needed!
- WARNING: Modem did not connect recently, data possibly not complete
- WARNING: Modem did not connect for xxxx seconds, please check modem

Table 3 Example of an e-mail with a Warning message

From:	noreply@eijkelkampcarefree.com
To:	E-mailaddress-1@yourcompany.com
CC:	
Subject:	30000 211(Send interval)
Message text:	Explanation of the codes
WARNING: The external sensor isn't responding, unable to send log data! WARNING: Battery capacity critical on port 1, service needed! [WellModemStatus] ModemSerialNumber=30000 ModemSoftwareVersion=3.1.0 ModemHardwareVersion=3 ReasonReport=5: Send Interval OfflineDuration=0 seconds SignalStrength=-75 dBm Temperature=25.7 degC BatteryCapacity=99% BatteryCapacityAlarm=20% BatteryCapacityPort1=16% DateTimeSend=17-09-2010 14:30:55 ...	

2.2   Communication from the user to the modem

2.2.1   Settings

The table below gives an overview of the possible settings (parameters) of the modem or its connected sensor(s) that can be changed through an e-mail request.

Parameter	Description	Possible values
BatteryCapacityAlarm	The threshold (in %) for the battery capacity of the modem. If the battary capacity is below this threshold, a battery low error will be generated and send to the email address of the user.	2 - 98
ModemLocation	The location of the modem.	A text of a maximum of 20 characters. The following characters are not allowed: '\', '/', ':', '"', '<', '>', '|', '*', '?'
GPSCoordinates	The GPS coordinates of the location of the modem.	A text of a maximum of 20 characters.
WakeUpInterval	The choice (in seconds) of the wake-up interval of the modem.	300-86400
RtcSynchEnable	Should the internal clock of the modem regularly be synchronzed with the GDT Server? 0 = NO 1 = YES	0-1
RtcSynchInterval	The choice of interval (in days) between the successive RTC synchronizations.	1-255
DayLightSaving	Activation or deactivation of day light saving time (DST = difference in Summer / Winter time). 0 = OFF 1 = ON	0-1
TimeZone	The choice of time zone in which the modem is located.	Valid time zone. E.g. Europe/Amsterdam
SMSAlertLanguage	The choice of language in which the SMS message will be send. The available languages are: • Dutch (NL) • English (ENG) • German (GER) • French (FR)	'NL', 'ENG', 'GER', 'FR'
Redundancy	During a send interval, measurement data from the specified number of previous send intervals will be sent. 0 = OFF 1 = 1 redundancy send interval 2 = 2 redundancy send intervals	0-2

Parameter	Description	Possible values
EmailAddress<n>	The e-mail address to which the GDT Server should sent the emails. Error messages will only be sent to n=1 (the first e-mail address).	Valid e-mail address of a maximum of 55 characters.
DestinationNumber<n>	It is possible to also receive alarm and error messages by text (SMS). This option is automatically activated when at least one destination number is provided. Error messages will only be sent to n=1 (the first telephone number).	Valid telephone number between 8 and 14 figures. No leading zeros or '+'.
AttachmentType	The choice of the format of the attachment that will be enclosed in the e-mail message.	'MON' or 'CSV' In case of SDI-12 only CSV
ConvertToAbsoluteValue	Should the data of the old 2-eye Diver be converted to equal the data of modern Divers? 0 = NO 1 = YES	0-1
ExportAsMiniDiver	Should the data from the internal Baro be exported as a Baro-Diver (needed to import into Diver Office)? 0 = NO 1 = YES	0-1
CSVIncludeHeader	Should a header with sensor information be added to the CSV? 0 = NO 1 = YES	0-1
CSVDeactivatedChannels	Should there be room reserved for deactivated channels? 0 = NO 1 = YES	0-1
CSVSeperator	Which character should be used to separate the channels in the CSV file? 0 = ; 1 = TAB	0-1
CSVDecimal	Which character should be used as a decimal in the CSV file?	'.' or ','
LocationPort<n>	Location of the sensor that is connected to port <n>.	A text of a maximum of 20 characters. The following characters are not allowed: '\', '/', ':', '"', '<', '>', '|', '*', '?'
OffsetPort<n>	Change the starting point of port <n>	Number of a maximum of 9 figures (including ',' or '-').
AltitudePort<n>	Height indicator (in meters) required for the pressure calculation in 2-eye Divers. For other types of Divers: only value 0 is allowed.	0-30000 (not supported with SDI-12)

Parameter	Description	Possible values
InternalCompensationPort<n>	Should the measurement values of the connected Diver on port <n> automatically be compensated by the GDT Server (based on the internal baro of the modem)? 0 = NO 1 = YES	0-1
AverageMeasurementPort<n>	Should the average measurement of the connected e+ sensor be activated? 0 = NO 1 = YES	0-1
SampleIntervalPort<n>	Measurement interval (in seconds) of the sensor that is connected to port <n>.	1-356400 In case of SDI-12 minimal 300
SendIntervalPort<n>	The interval (in seconds) between two successive send intervals.	900-31536000
ActivatedPort<n>Channel<x>	Should data be sent of channel <x> of the sensor connected to port <n>? 0 = NO 1 = YES	0-1
AlarmHighPort<n>Channel<x>	Alarm High settings	MinimalValuePort<n>Channel<x> - MaximumValue- Port<n> Channel<x>
HystHighPort<n>Channel<x>	Hysteresis High settings	MinimalValuePort<n>Channel<x> - MaximumValue- Port<n> Channel<x>
HystLowPort<n>Channel<x>	Hysteresis Low settings	MinimalValuePort<n>Channel<x> - MaximumValue-Port<n> Channel<x>
AlarmLowPort<n>Channel<x>	Alarm Low settings	MinimalValuePort<n>Channel<x> - MaximumValue-Port<n> Channel<x>
FluctuationAlarmPort<n>Channel<x>		0 - (MaximumValue-Port<n> Channel<x> - MinimalValuePort< n>Channel<x>)
Alarmconfiguration<n>	Alarmconfiguration is used to setup alarm checking by the GDT-S Prime itself, if the alarm situation changes the GDT-S Prime wakes up prematurely. Thius way alarms can be communicatedreal time instead of waiting for the regular wake-up.	Value has following structure: Port;Channel;Type;Above/Below;Signaling;Compensate;Interval;AlarmValue;Hysteresis Clarification parts: - Port: port logger is connected to (1 to max_port, use 0 for internal barometer) - Channel: channel of logger that is to be checked - AlarmType: check value (0) or fluctuation (1) - Above/Below: should check for measurement above (0) or below (1) alarm value - Signalling: only signal if alarm is set (0) or also if alarm is unset (1) - Compensate: should measurement be compensated first (1) or not (0) - Interval: interval in seconds between checks - AlarmValue: value to check against - Hysteresis: value to check against to unset alarm

2.2.2 Password security (optional)

The table below shows the security measures of the modem.

Security measure	Explanation
The serial number in the subject field is checked.	The serial number of the modem should be correct. Otherwise, the e-mail message will not reach the modem.
The e-mail address of the sender is checked.	The e-mail address of the sender must be one of the e-mail addresses that is configured for the modem. Otherwise, the request will be rejected.
The password in the text of the e-mail is checked (optional).	If a password is configured, this password must be added in every request message. Otherwise, the request will be rejected.

The password security is an additional and optional security measure. Eijkelkamp takes care of the configuration of the password. If a password is configured, this password must be added in every request message. Refer to 2.2.4 for an example. Communication

Moreover, the modem will first send an authentication request to e-mailaddress-1. The modem will repeat this authentication request every wake-up interval until it receives an answer from e-mail address-1 with the content 'password=<password>'. Only after the correct password has been sent, the modem will send the data message e-mail (including the attachment with measurement data). The authentication request will look like the following example:

From:	noreply@eijkelkampcarefree.com
To:	E-mailaddress-1@yourcompany.com
CC:	
Subject:	30000 211(Send interval)

Please check if the following settings are correct:
Emailaddress1=E-mailadress-1@yourcompany.com
Emailaddress2=Employee@yourcompany.com
Emailaddress3=
Emailaddress4=
Destination number1=31612345678
Destination number2=
Destination number3=
Destination number4=

When all settings are correct, send an e-mail to the modem with the following text:
Password=<pass>, where <pass> is the set password in the modem.

When the settings are incorrect, please contact Eijkelkamp.

2.2.3 Changing the settings

Note
Refer to 2.2.1 to see which settings can be changed.

1. Start a new e-mail.

Note
Your e-mail address will appear automatically in the 'From' field.

2. Adjust the parameters that you want to change. Type the request in the e-mail message field. Refer to 2.2.4 for examples of change request e-mails.

Note
If the password is activated each change request e-mail must include the text password=<password> !

3. Type the serial number of the modem in the 'Subject' field.

Note
The subject line of the e-mail must consist solely of the serial number of the modem. Otherwise the modem will not react to the e-mail. So, do not begin with RE, FW, etc.

4. Type the e-mail address of the modem in the 'To' field.
5. Select 'Plain text' in the message format.
6. Press the 'Send' button.

Note
The change will be accepted, or not accepted, at the next wake-up interval.
The next e-mail message will contain the status of the change:
- **# = accepted**
- **! = not accepted**

Refer to 2.2.5 for examples of modem reply e-mails.

Note
It is possible to give instructions for more than one change in a single e-mail. However, make sure that the various settings do not contradict one another.

2.2.4   Examples of change request e-mails

From:	E-mailaddress-1@yourcompany.com
To:	Modem1@Eijkelkamp.com
CC:	
Subject:	30000000
BatteryCapacityAlarm=15 Password=Eijkelkamp1	

Note
After the modem accepts the change request, the modem will send an alarm message to the user when the battery capacity reaches 15%. In this example, there is also a password that is used as extra security.

From:	E-mailaddress-1@yourcompany.com
To:	Modem2@Eijkelkamp.com
CC:	
Subject:	34400891
SampleIntervalPort2=900 SampleIntervalPort4=4000 SampleIntervalPort5=313200	

Note
After the modem accepts the change request, the modem will request the sensors connected to ports 2,4 and 5 to send measurement data to the modem at an interval of:
- **900 seconds (port 2)**
- **4000 seconds (port 4)**
- **313200 seconds (port 5)**

From:	E-mailaddress-1@yourcompany.com
To:	Modem3@Eijkelkamp.com
CC:	
Subject:	31100000
CSVDecimal=,	

Note
After the modem accepts the change request, the modem will send data messages with an attachment in which the values are seperated by a decimal comma (',').

From:	E-mailaddress-1@yourcompany.com
To:	Modem3@Eijkelkamp.com
CC:	
Subject:	32337606
DayLightSaving=0	

Note
After the modem accepts the change request, the internal clock of the modem will not change at Summer - Winter time transitions.

From:	E-mailaddress-1@yourcompany.com
To:	Modem3@Eijkelkamp.com
CC:	
Subject:	32337606
TimeZone=America/New_York	

Note
After the modem accepts the change request, the internal clock of the modem will be set to the time zone of New York, USA. For a complete list of time zones, refer to 2.4.

From:	E-mailaddress-1@yourcompany.com
To:	Modem3@Eijkelkamp.com
CC:	
Subject:	32337606
LocationPort5=Diver5	

Note
After the modem accepts the change request, the location of the sensor connected to port 5 will have changed to Diver5.

From:	E-mailaddress-1@yourcompany.com
To:	Modem3@Eijkelkamp.com
CC:	
Subject:	32337606
CheckHistory=1	

Note
After the modem accepts the request, you will receive an e-mail with a list of changes that have occured in the past.

From:	E-mailaddress-1@yourcompany.com
To:	Modem3@Eijkelkamp.com
CC:	
Subject:	31100000
CheckSettings=1	

Note
After the modem accepts the request, you will receive an extra e-mail containing the settings of the modem.

From:	E-mailaddress-1@yourcompany.com
To:	Modem3@Eijkelkamp.com
CC:	
Subject:	31100000
ResetModem=1	

Note
After the modem accepts the request, the GDT Server will re-read all the modem parameters and will restart the connected sensors.

CAUTION
If you restart a sensor, all existing data in the sensor will be deleted!

From:	E-mailaddress-1@yourcompany.com
To:	Modem3@Eijkelkamp.com
CC:	
Subject:	31100000
ShutDown=1	

Note
After the modem accepts the request, the modem is set in the power OFF mode. This way the modem can be safely stored.

CAUTION
When the modem has shut down, the modem can only be activated locally!

2.2.5   Examples of modem reply e-mails

From:	noreply@eijkelkampcarefree.comyourcompany.com
To:	E-mailaddress-1@yourcompany.com
CC:	
Subject:	30000000 266(Wakeup interval)
#ModemLocation=Sheffield	

Note
The modem accepts the change request. The new modem location is Sheffield.

From:	noreply@eijkelkampcarefree.comyourcompany.com
To:	E-mailaddress-1@yourcompany.com
CC:	
Subject:	30000000 268(Wakeup interval)
!RtcSynchEnable=1	

Note
The modem did not accept the change request. The old setting RtcSynchEnable=1 continues to be used.

2.3   Troubleshooting

Problem	Possible cause	Possible solution
Why does the modem not accept my change request?	Change request e-mail was incorrectly drawn up. Possible errors: • Wrong serial number in 'Subject' field; • Additions in the 'Subject' field that are not allowed (e.g. 'RE', 'FW' or extra space); • Incorrect modem address in the 'To' field; • The message format is not configured to 'Plain text' (e.g. 'HTML' or 'Rich text' is chosen); • Typo in the message field; • Invalid value or the maximum of characters is exceeded. Refer to 2.2.1.	Check whether a "!" or "#" is in front of the parameter you want to change. Refer to 2.2.3. Check whether the change request e-mail was correctly drawn up. A change request e-mail has to be drawn up as follows: • The correct serial number must be entered in the 'Subject' field without any additions, such as RE or FW, etc; • The correct modem e-mail address must be entered in the 'To' field; • The message format must be configured to 'Plain text'; • The change request must be drawn up correctly in accordance with the configuration table.
The system worked for a while but is no longer receiving data; what is the problem?	The battery of the modem is empty. The battery of the sensor is empty. The modem needs to be checked (service needed).	Has the modem sent a low battery alarm or error message email or SMS? If so, the battery might be empty. If not, it is advisable to first send a change request to the modem and wait and see whether a confirmation e-mail is sent back at the wake-up interval. If no confirmation e-mail is sent back, you will have to check the modem in the field to find out why the system is no longer functioning. If the modem does not send emails, contact Eijkelkamp.
The system worked for a while but I am no longer receiving emails; what is the problem?	The inbox of your e-mail account is full.	Check if your inbox is full. If so, empty your inbox. If not, contact Eijkelkamp.

2.4   Time zones

The list below gives the valid time zone values. Other time zones might be added in the future. If your time zone is not available in the list, please contact Eijkelkamp.

Continent/Region/Country/Etc.		Time zone value
Africa	A	• Africa/Abidjan • Africa/Accra • Africa/Addis_Ababa • Africa/Algiers • Africa/Asmara • Africa/Asmera
	B	• Africa/Bamako • Africa/Bangui • Africa/Banjul • Africa/Bissau • Africa/Blantyre • Africa/Brazzaville • Africa/Bujumbura
	C	• Africa/Cairo • Africa/Casablanca • Africa/Ceuta • Africa/Conakry
	D	• Africa/Dakar • Africa/Dar_es_Salaam • Africa/Djibouti • Africa/Douala
	E	• Africa/El_Aaiun
	F	• Africa/Freetown
	G	• Africa/Gaborone
	H	• Africa/Harare
	J	• Africa/Johannesburg • Africa/Juba
	K	• Africa/Kampala • Africa/Khartoum • Africa/Kigali • Africa/Kinshasa
	L	• Africa/Lagos • Africa/Libreville • Africa/Lome • Africa/Luanda • Africa/Lusaka
	M	• Africa/Malabo • Africa/Maputo • Africa/Maseru • Africa/Mbabane • Africa/Mogadishu • Africa/Monrovia

Continent/Region/Country/Etc.		Time zone value
Africa	N	• Africa/Nairobi • Africa/Ndjamena • Africa/Niamey • Africa/Nouakchott
	O	• Africa/Ouagadougou
	P	• Africa/Porto-Novo
	S	• Africa/Sao_Tome
	T	• Africa/Timbuktu • Africa/Tripoli • Africa/Tunis
	W	• Africa/Windhoek
America	A	• America/Adak • America/Anchorage • America/Anguilla • America/Antigua • America/Araguaina • America/Argentina/Buenos_Aires • America/Argentina/Catamarca • America/Argentina/ComodRivadavia • America/Argentina/Cordoba • America/Argentina/Jujuy • America/Argentina/La_Rioja • America/Argentina/Mendoza • America/Argentina/Rio_Gallegos • America/Argentina/Salta • America/Argentina/San_Juan • America/Argentina/San_Luis • America/Argentina/Tucuman • America/Argentina/Ushuaia • America/Aruba • America/Asuncion • America/Atikokan • America/Atka
	B	• America/Bahia • America/Bahia_Banderas • America/Barbados • America/Belem • America/Belize • America/Blanc-Sablon • America/Boa_Vista • America/Bogota • America/Boise • America/Buenos_Aires

Continent/Region/Country/Etc.		Time zone value
America	C	• America/Cambridge_Bay • America/Campo_Grande • America/Cancun • America/Caracas • America/Catamarca • America/Cayenne • America/Cayman • America/Chicago • America/Chihuahua • America/Coral_Harbour • America/Cordoba • America/Costa_Rica • America/Cuiaba • America/Curacao
	D	• America/Danmarkshavn • America/Dawson • America/Dawson_Creek • America/Denver • America/Detroit • America/Dominica
	E	• America/Edmonton • America/Eirunepe • America/El_Salvador • America/Ensenada
	F	• America/Fort_Wayne • America/Fortaleza
	G	• America/Glace_Bay • America/Godthab • America/Goose_Bay • America/Grand_Turk • America/Grenada • America/Guadeloupe • America/Guatemala • America/Guayaquil • America/Guyana
	H	• America/Halifax • America/Havana • America/Hermosillo
	I	• America/Indiana/Indianapolis • America/Indiana/Knox • America/Indiana/Marengo • America/Indiana/Petersburg • America/Indiana/Tell_City • America/Indiana/Vevay • America/Indiana/Vincennes • America/Indiana/Winamac • America/Indianapolis • America/Inuvik • America/Iqaluit

Continent/Region/Country/Etc.		Time zone value
America	J	• America/Jamaica • America/Jujuy • America/Juneau
	K	• America/Kentucky/Louisville • America/Kentucky/Monticello • America/Knox_IN • America/Kralendijk
	L	• America/La_Paz • America/Lima • America/Los_Angeles • America/Louisville • America/Lower_Princes
	M	• America/Maceio • America/Managua • America/Manaus • America/Marigot • America/Martinique • America/Matamoros • America/Mazatlan • America/Mendoza • America/Menominee • America/Merida • America/Metlakatla • America/Mexico_City • America/Miquelon • America/Moncton • America/Monterrey, • America/Montevideo • America/Montreal • America/Montserrat
	N	• America/Nassau • America/New_York • America/Nipigon • America/Nome • America/Noronha • America/North_Dakota/Beulah • America/North_Dakota/Center • America/North_Dakota/New_Salem
	O	• America/Ojinaga
	P	• America/Panama • America/Pangnirtung • America/Paramaribo • America/Phoenix • America/Port-au-Prince • America/Port_of_Spain • America/Porto_Acre • America/Porto_Velho • America/Puerto_Rico

Continent/Region/Country/Etc.		Time zone value
America	R	• America/Rainy_River • America/Rankin_Inlet • America/Recife • America/Regina • America/Resolute • America/Rio_Branco • America/Rosario
	S	• America/Santa_Isabel • America/Santarem • America/Santiago • America/Santo_Domingo • America/Sao_Paulo • America/Scoresbysund • America/Shiprock • America/Sitka • America/St_Barthelemy • America/St_Johns • America/St_Kitts • America/St_Lucia • America/St_Thomas • America/St_Vincent • America/Swift_Current
	T	• America/Tegucigalpa • America/Thule • America/Thunder_Bay • America/Tijuana • America/Toronto • America/Tortola
	V	• America/Vancouver • America/Virgin
	W	• America/Whitehorse • America/Winnipeg
	Y	• America/Yakutat • America/Yellowknife
Antartica		• Antarctica/Casey • Antarctica/Davis • Antarctica/DumontDUrville • Antarctica/Macquarie • Antarctica/Mawson • Antarctica/McMurdo • Antarctica/Palmer • Antarctica/Rothera • Antarctica/South_Pole • Antarctica/Syowa • Antarctica/Vostok
Arctic		• Arctic/Longyearbyen

Continent/Region/Country/Etc.		Time zone value
Asia (including Middle-East)	A	• Asia/Aden • Asia/Almaty • Asia/Amman • Asia/Anadyr • Asia/Aqtau • Asia/Aqtobe • Asia/Ashgabat • Asia/Ashkhabad
	B	• Asia/Baghdad • Asia/Bahrain • Asia/Baku • Asia/Bangkok • Asia/Beijing • Asia/Beirut • Asia/Bishkek • Asia/Brunei
	C	• Asia/Calcutta • Asia/Choibalsan • Asia/Chongqing • Asia/Chungking • Asia/Colombo
	D	• Asia/Dacca • Asia/Damascus • Asia/Dhaka • Asia/Dili • Asia/Dubai • Asia/Dushanbe
	G	• Asia/Gaza
	H	• Asia/Harbin • Asia/Hebron • Asia/Ho_Chi_Minh • Asia/Hong_Kong • Asia/Hovd
	I	• Asia/Irkutsk • Asia/Istanbul
	J	• Asia/Jakarta • Asia/Jayapura • Asia/Jerusalem
	K	• Asia/Kabul • Asia/Kamchatka • Asia/Karachi • Asia/Kashgar • Asia/Kathmandu • Asia/Katmandu • Asia/Kolkata • Asia/Krasnoyarsk • Asia/Kuala_Lumpur • Asia/Kuching • Asia/Kuwait

Continent/Region/Country/Etc.		Time zone value
Asia (including Middle-East)	M	• Asia/Macao • Asia/Macau • Asia/Magadan • Asia/Makassar • Asia/Manila • Asia/Muscat
	N	• Asia/Nicosia • Asia/Novokuznetsk • Asia/Novosibirsk
	O	• Asia/Omsk • Asia/Oral
	P	• Asia/Phnom_Penh • Asia/Pontianak • Asia/Pyongyang
	Q	• Asia/Qatar • Asia/Qyzylorda
	R	• Asia/Rangoon • Asia/Riyadh
	S	• Asia/Saigon • Asia/Sakhalin • Asia/Samarkand • Asia/Seoul • Asia/Shanghai • Asia/Singapore
	T	• Asia/Taipei • Asia/Tashkent • Asia/Tbilisi • Asia/Tehran • Asia/Tel_Aviv • Asia/Thimbu • Asia/Thimphu • Asia/Tokyo
	U	• Asia/Ujung_Pandang • Asia/Ulaanbaatar • Asia/Ulan_Bator • Asia/Urumqi
	V	• Asia/Vientiane • Asia/Vladivostok
	Y	• Asia/Yakutsk • Asia/Yekaterinburg • Asia/Yerevan

Continent/Region/Country/Etc.		Time zone value
Atlantic ocean		• Atlantic/Azores • Atlantic/Bermuda • Atlantic/Canary • Atlantic/Cape_Verde • Atlantic/Faeroe • Atlantic/Faroe • Atlantic/Jan_Mayen • Atlantic/Madeira • Atlantic/Reykjavik • Atlantic/South_Georgia • Atlantic/St_Helena • Atlantic/Stanley
Australia	A	• Australia/ACT • Australia/Adelaide
	B	• Australia/Brisbane • Australia/Broken_Hill
	C	• Australia/Canberra • Australia/Currie
	D	• Australia/Darwin
	E	• Australia/Eucla
	H	• Australia/Hobart
	L	• Australia/LHI • Australia/Lindeman • Australia/Lord_Howe
	M	• Australia/Melbourne
	N	• Australia/NSW • Australia/North
	P	• Australia/Perth
	Q	• Australia/Queensland
	S	• Australia/South • Australia/Sydney
	T	• Australia/Tasmania
	V	• Australia/Victoria
	W	• Australia/West
	Y	• Australia/Yancowinna
Brazil		• Brazil/Acre • Brazil/DeNoronha • Brazil/East • Brazil/West
CET		• CET
CST6CDT		• CST6CDT

Continent/Region/Country/Etc.		Time zone value
Canada		• Canada/Atlantic • Canada/Central • Canada/East-Saskatchewan • Canada/Eastern • Canada/Mountain • Canada/Newfoundland • Canada/Pacific • Canada/Saskatchewan • Canada/Yukon
Chile		• Chile/Continental • Chile/EasterIsland
Cuba		• Cuba
EET		• EET
EST		• EST
EST5EDT		• EST5EDT
Egypt		• Egypt
Eire		• Eire
Etc		• Etc/GMT • Etc/GMT+0 • Etc/GMT+1 • Etc/GMT+10 • Etc/GMT+11 • Etc/GMT+12 • Etc/GMT+2 • Etc/GMT+3 • Etc/GMT+4 • Etc/GMT+5 • Etc/GMT+6 • Etc/GMT+7 • Etc/GMT+8 • Etc/GMT+9 • Etc/GMT-0 • Etc/GMT-1 • Etc/GMT-10 • Etc/GMT-11 • Etc/GMT-12 • Etc/GMT-13 • Etc/GMT-14 • Etc/GMT-2 • Etc/GMT-3 • Etc/GMT-4 • Etc/GMT-5 • Etc/GMT-6 • Etc/GMT-7 • Etc/GMT-8 • Etc/GMT-9 • Etc/GMT0 • Etc/Greenwich

Continent/Region/Country/Etc.		Time zone value
Etc		• Etc/UCT • Etc/UTC • Etc/Universal • Etc/Zulu
Europe	A	• Europe/Amsterdam • Europe/Andorra • Europe/Athens
	B	• Europe/Belfast • Europe/Belgrade • Europe/Berlin • Europe/Bratislava • Europe/Brussels • Europe/Bucharest • Europe/Budapest
	C	• Europe/Chisinau • Europe/Copenhagen
	D	• Europe/Dublin
	G	• Europe/Gibraltar • Europe/Guernsey
	H	• Europe/Helsinki
	I	• Europe/Isle_of_Man • Europe/Istanbul
	J	• Europe/Jersey
	K	• Europe/Kaliningrad • Europe/Kiev
	L	• Europe/Lisbon • Europe/Ljubljana • Europe/London • Europe/Luxembourg
	M	• Europe/Madrid • Europe/Malta • Europe/Mariehamn • Europe/Minsk • Europe/Monaco • Europe/Moscow
	N	• Europe/Nicosia
	O	• Europe/Oslo
	P	• Europe/Paris • Europe/Podgorica • Europe/Prague
	R	• Europe/Riga • Europe/Rome

Continent/Region/Country/Etc.		Time zone value
	S	• Europe/Samara • Europe/San_Marino • Europe/Sarajevo • Europe/Simferopol • Europe/Skopje • Europe/Sofia • Europe/Stockholm
	T	• Europe/Tallinn • Europe/Tirane • Europe/Tiraspol
	U	• Europe/Uzhgorod
	V	• Europe/Vaduz • Europe/Vatican • Europe/Vienna • Europe/Vilnius • Europe/Volgograd
	W	• Europe/Warsaw
	Z	• Europe/Zagreb • Europe/Zaporozhye • Europe/Zurich
GB		• GB • GB-Eire
GMT		• GMT • GMT+0 • GMT-0 • GMT0
Greenwich		• Greenwich
HST		• HST
Hongkong		• Hongkong
Iceland		• Iceland
Indian ocean		• Indian/Antananarivo • Indian/Chagos • Indian/Christmas • Indian/Cocos • Indian/Comoro • Indian/Kerguelen • Indian/Mahe • Indian/Maldives • Indian/Mauritius • Indian/Mayotte • Indian/Reunion
Iran		• Iran
Israel		• Israel
Jamaica		• Jamaica
Japan		• Japan
Kwajalein		• Kwajalein
Libya		• Libya

Continent/Region/Country/Etc.		Time zone value
MET		• MET
MST		• MST
MST7MDT		• MST7MDT
Mexico		• Mexico/BajaNorte • Mexico/BajaSur • Mexico/General
NZ		• NZ
NZ-CHAT		• NZ-CHAT
Navajo		• Navajo
PRC		• PRC
PST8PDT		• PST8PDT
Pacific ocean		• Pacific/Apia • Pacific/Auckland • Pacific/Chatham • Pacific/Chuuk • Pacific/Easter • Pacific/Efate • Pacific/Enderbury • Pacific/Fakaofo • Pacific/Fiji • Pacific/Funafuti • Pacific/Galapagos • Pacific/Gambier • Pacific/Guadalcanal • Pacific/Guam • Pacific/Honolulu • Pacific/Johnston • Pacific/Kiritimati • Pacific/Kosrae • Pacific/Kwajalein • Pacific/Majuro • Pacific/Marquesas • Pacific/Midway • Pacific/Nauru • Pacific/Niue • Pacific/Norfolk • Pacific/Noumea • Pacific/Pago_Pago • Pacific/Palau • Pacific/Pitcairn • Pacific/Pohnpei • Pacific/Ponape • Pacific/Port_Moresby • Pacific/Rarotonga • Pacific/Saipan • Pacific/Samoa • Pacific/Tahiti • Pacific/Tarawa • Pacific/Tongatapu

Continent/Region/Country/Etc.		Time zone value
Pacific ocean		• Pacific/Truk • Pacific/Wake • Pacific/Wallis • Pacific/Yap
Poland		• Poland
Portugal		• Portugal
ROC		• ROC
ROK		• ROK
Singapore		• Singapore
Turkey		• Turkey
UCT		• UCT
US		• US/Alaska • US/Aleutian • US/Arizona • US/Central • US/East-Indiana • US/Eastern • US/Hawaii • US/Indiana-Starke • US/Michigan • US/Mountain, • US/Pacific • US/Pacific-New • US/Samoa
UTC		• UTC
Universal		• Universal
W-SU		• W-SU
WET		• WET
Zulu		• Zulu