



Powering Business Worldwide



OPC Server for BMS

For easy facility management

A building management system (BMS) is a computer-based control system usually installed in large buildings in order to control and monitor the building's mechanical and electrical equipment such as ventilation, power systems, fire systems, lighting, etc. BMS systems are a critical component to managing energy consumption and improve reliability and life safety.

In order to support facility managers in their effort of monitoring and targeting energy consumption, improve life safety, save time and money during maintenance, Eaton enables its CGLine+ systems to communicate with their BMS through an OPC server.

This document describes the items which are usable for BMS software, all other items in the OPC-Server are reserved for CGVision applications.

Features:

- Easy BMS connection via IP based OPC DA2.0
- One OPC-Server for up to 32 CGLine+ Web-Controller
- 20 sum status information of each CGLine+ Web-Controller
- 10 commandos from BMS to each CGLine+ Web-Controller
- Definition of up to 8 function test groups & 8 duration test groups
- 20 sum status information of each single lines 1-4
- 20 sum status information of each single zone 1-16
- 16 status information of each single luminaire 1-800

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General

Name of the OPC Server: **"OPC_CGLine_PLUS"**

The CGLine Plus OPC Server conforms to the OPC Data Access Automation Specification 2.0 of the OPC Foundation.

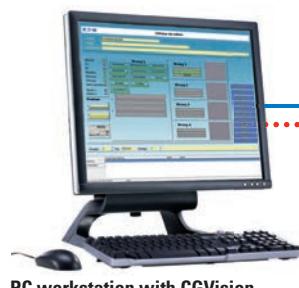
The CGLine Plus OPC Server provides items to connect a BMS to CGLine+ Web-Controller.



Note: By using a CGVision, the system will be automatically added to the CGLine Plus OPC Server when the system will be configured on CGVision. Only the single datapoints for Zones and Lamps have to be configured manual, if this datapoints are necessary.

Scematic overview:

- LAN (RJ45)
- LAN connection between PC with CGVision and PC with BMS Software
- CGLine+ Bus



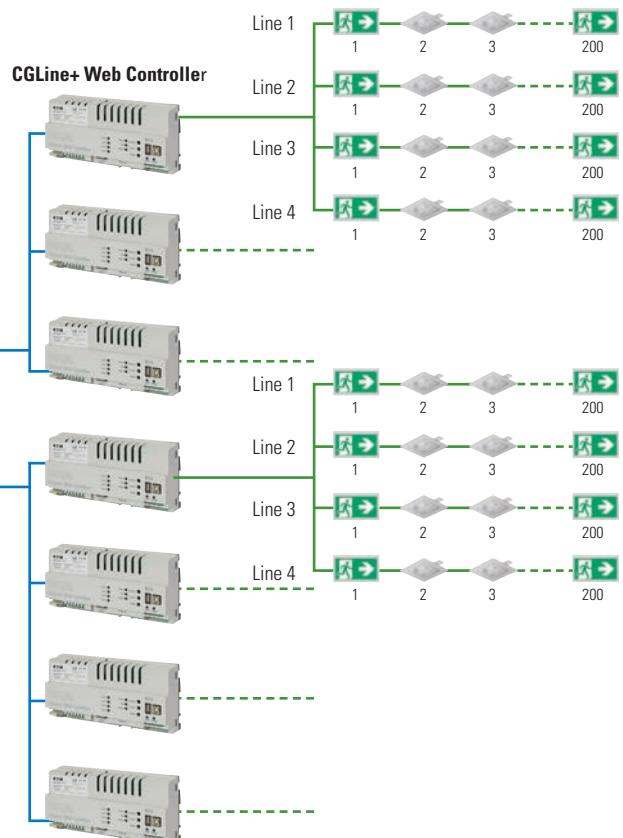
PC workstation with CGVision



Ethernet TCP / IP



Building Management System (BMS)
(e.g. TAC, Vista)

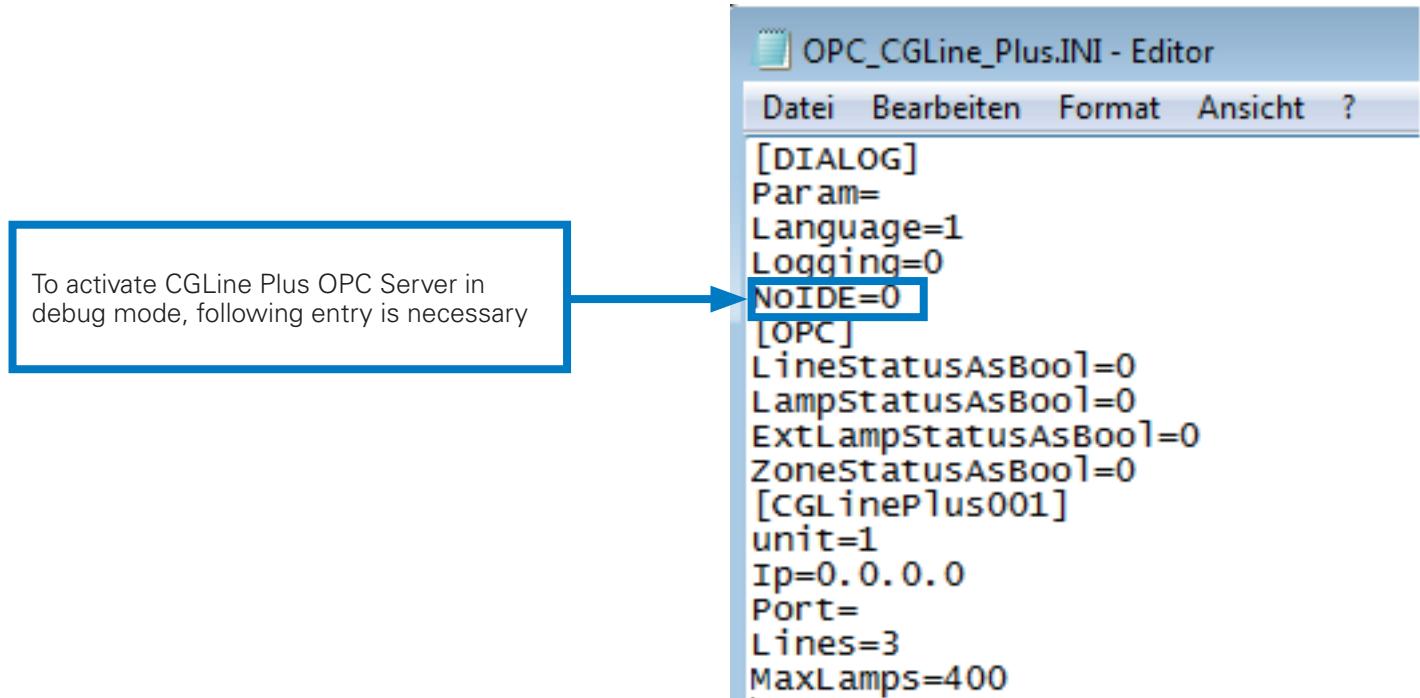


CGLine Plus OPC Server - Debug mode activation

Debug mode of the CGLine Plus OPC Server can be activated with following entry on the "OPC_CGLine_Plus.ini" file:

- Set entry "NoIDE=0" on section "Dialog"

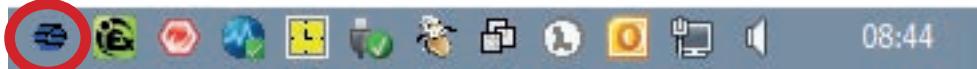
Folder of the Ini-File: [C:\Program Files \(x86\)\CEAG\CGLine Plus OPC Server\OPC_CGLine_Plus.ini](C:\Program Files (x86)\CEAG\CGLine Plus OPC Server\OPC_CGLine_Plus.ini)



ATTENTION: Remove the debug mode (set NoIDE=1), when the BMS configuration has finished.

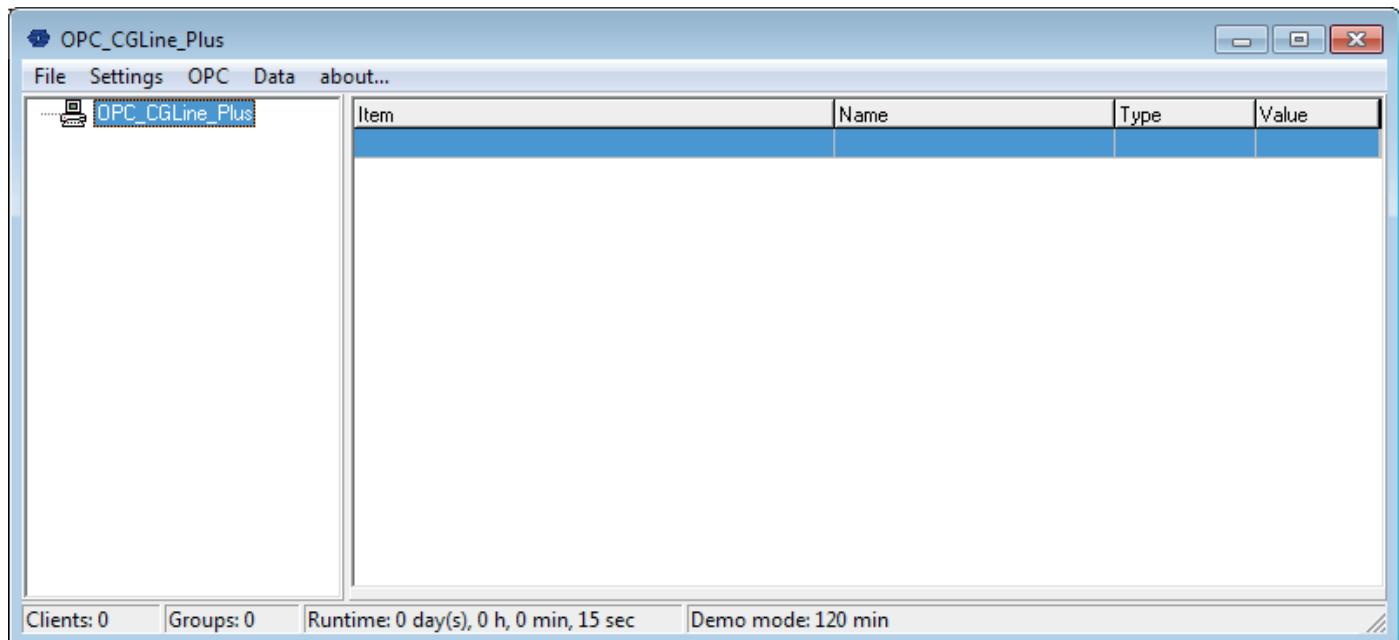
CGLine Plus OPC Server – Start CGLine Plus OPC Server

Start "OPC_CGLine_Plus.exe" file in the folder "[C:\Program Files \(x86\)\CEAG\CGLine Plus OPC Server](C:\Program Files (x86)\CEAG\CGLine Plus OPC Server)".
CGLine Plus OPC Server is executed as background task. An icon appears on the Windows status bar.

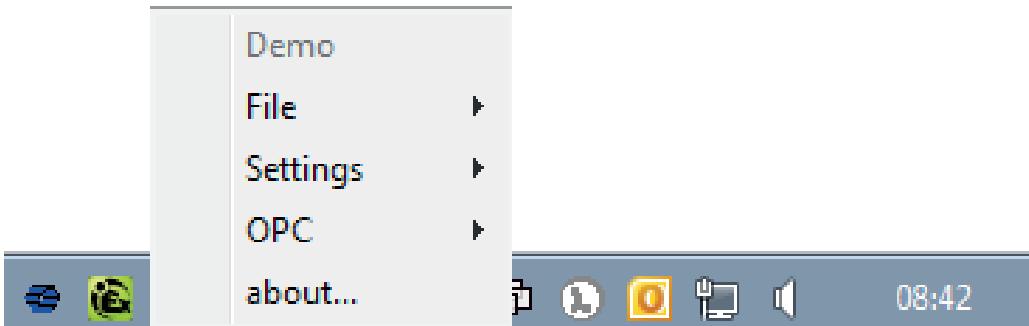


Double click on OPC_CGLine_Plus icon:

1- If Debug mode is activated (NolDE=0), OPC_CGLine_Plus interface appears.



2- If debug mode is not activated (NolDE=1), only the Pullup-Menu occurs.

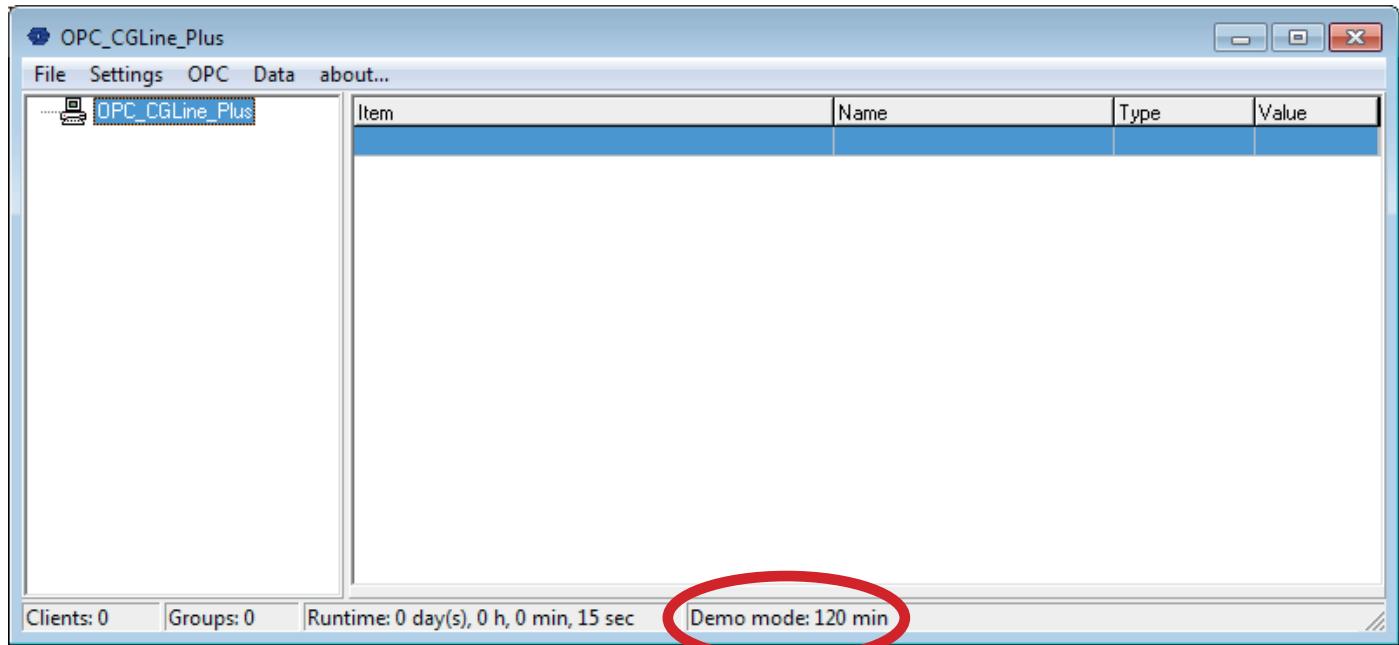


CGLine Plus OPC Server - Check license status

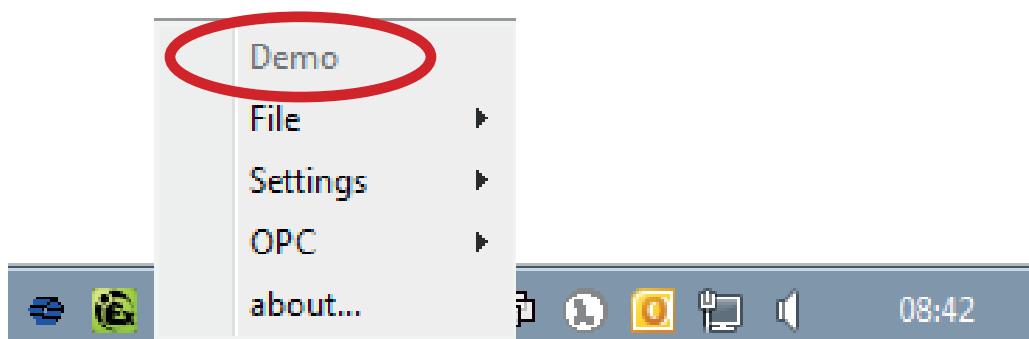
If license is not available, OPC_CGLine_Plus can be used for 2 hours only.

The demo mode will be shown on the status bar or on the pullup menu::

Debug mode (NoIDE=0):

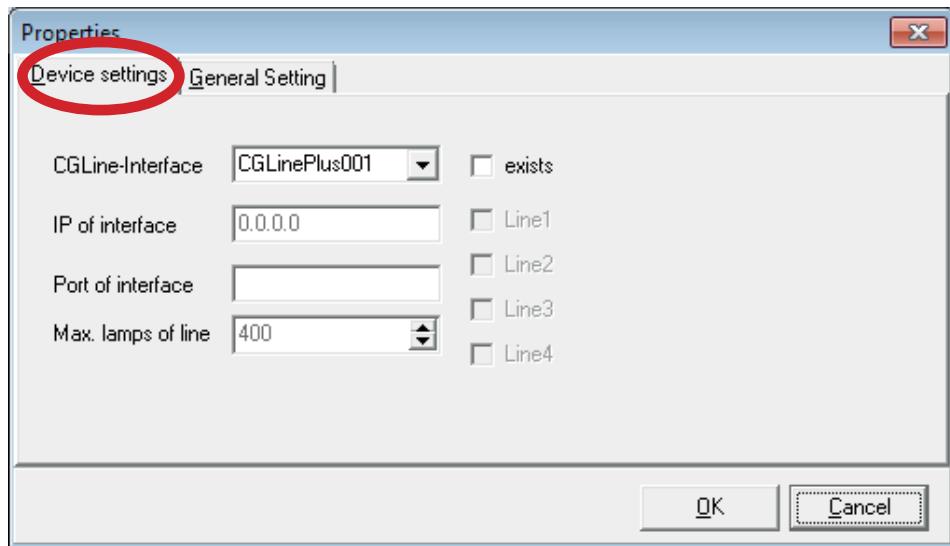


Normal mode (NoIDE=1):



CGLine Plus OPC Server – Connect/Add CGLine+ Web-Controller

On "Setting"-menu, select "Configuration" and change the settings in the Dialog "Properties"



Configure a system

ATTENTION:

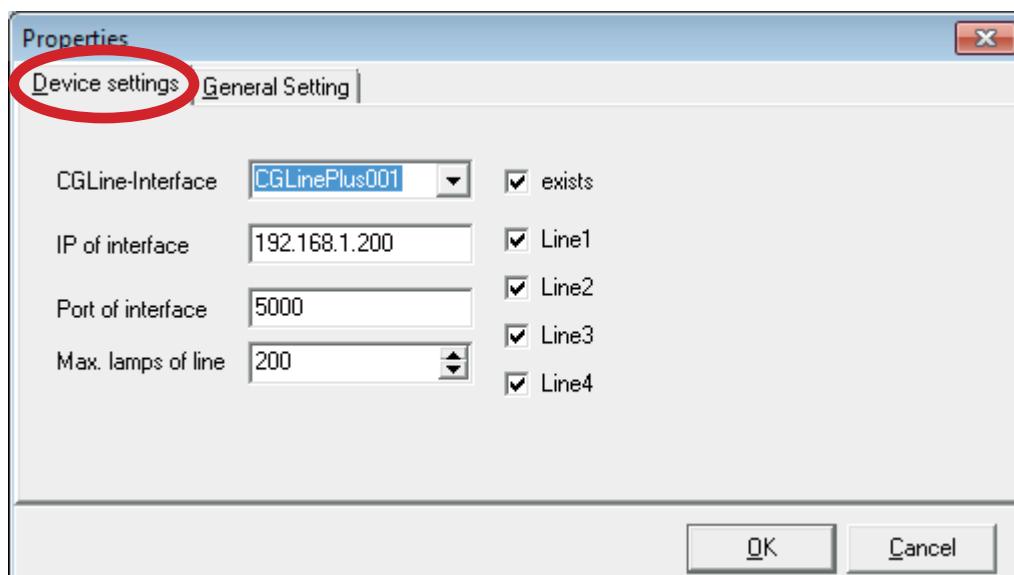
The CGLine+ Web-Controller can be used as 2 line system with 400 lamps per line or as 4 line system with 200 lamps per line. The configuration of the system on CGLine Plus OPC Server have to be absolutely the same as the setting on the CGLine+ Web-Controller.

The port of the CGLine+ Web-Controller is currently fix (Port: 5000) and cannot be changed.

Select "Device Settings":

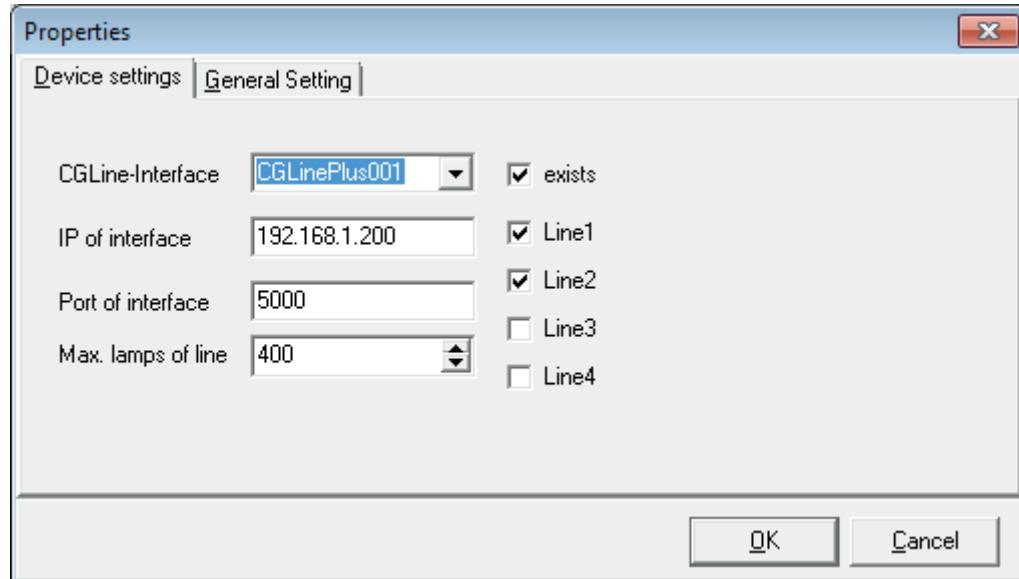
- Select "CGLinePlus001" for example on "CGLine-Interface" area.
- Click on "Exists"
- Select number of lines (4 Line system (Line1- Line4) or 2 Line system (Line1 and Line2))
- Insert the IP Address of the CGLine+ Web-Controller on "IP of interface"
- Insert Port 5000 on "Port of interface"
- Insert lamps per line on "Max. lamps of line" (4 Line system (200) or 2 Line system (400))

Configuration of 4 Line CGLine+ Web-Controller with 200 lamps per line:



CGLine Plus OPC Server – Connect/Add CGLine+ Web-Controller

Configuration of 2 Line CGLine+ Web-Controller with 400 lamps per line:

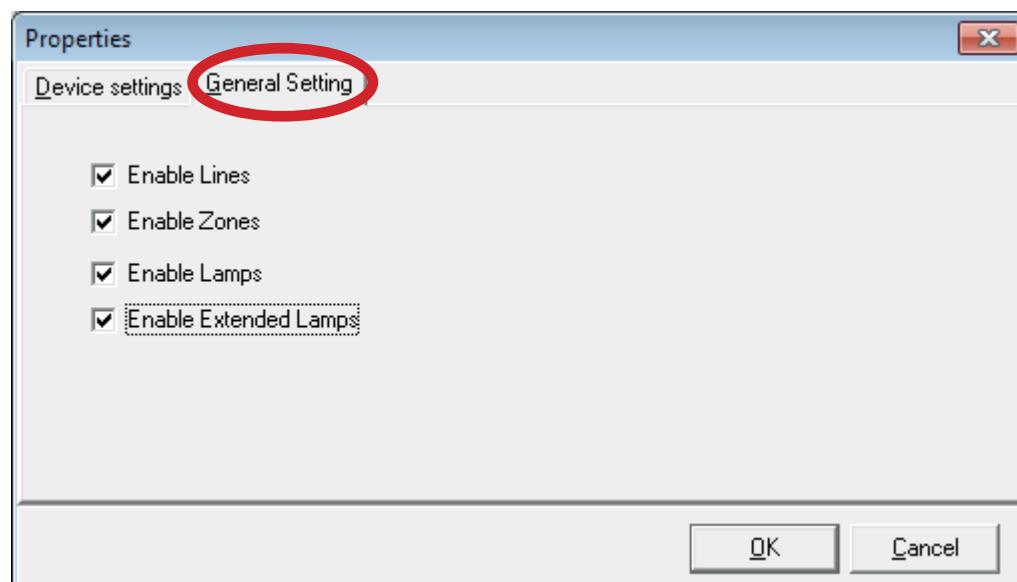


Select “General Settings”:

Depended on the datapoints which shall be used, the single datapoints can be selected on this dialog.

- Enable Lines -> enable the line datapoints
- Enable Zones -> enable the zone datapoints
- Enable Lamps -> enable the lamp datapoints
- Enable Extended Lamps -> enable the extended lamp datapoints

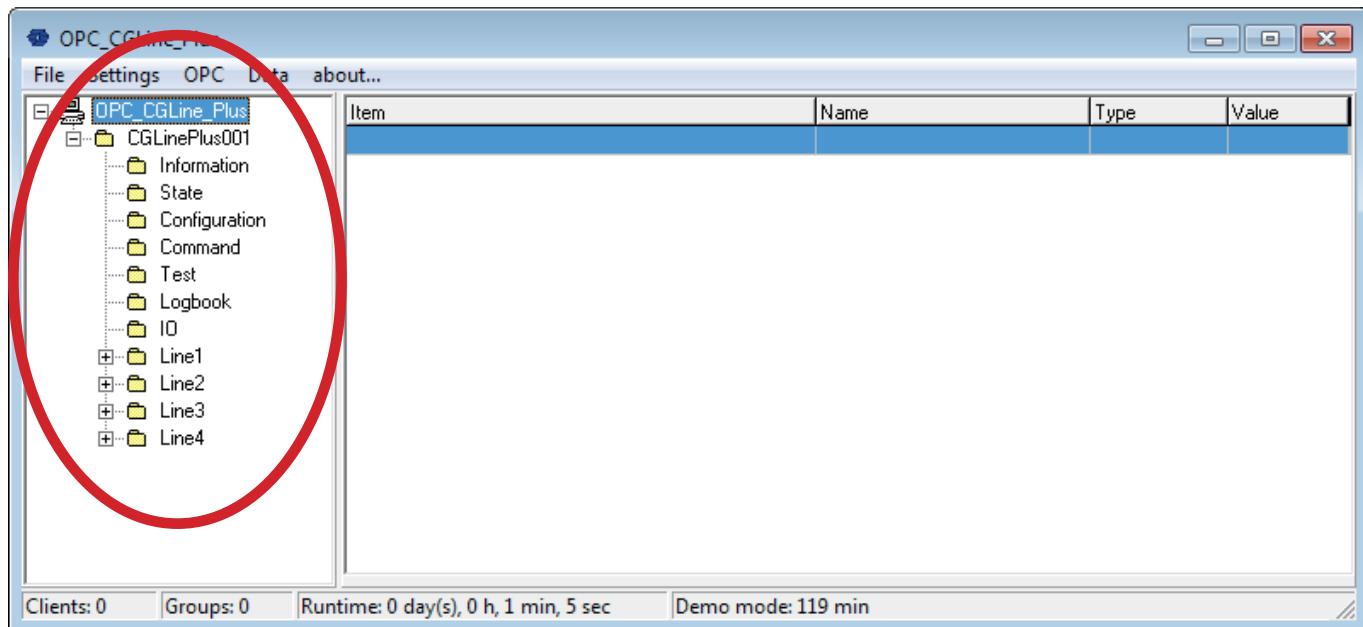
NOTE: the number of datapoints has influence to the startup time of the OPC



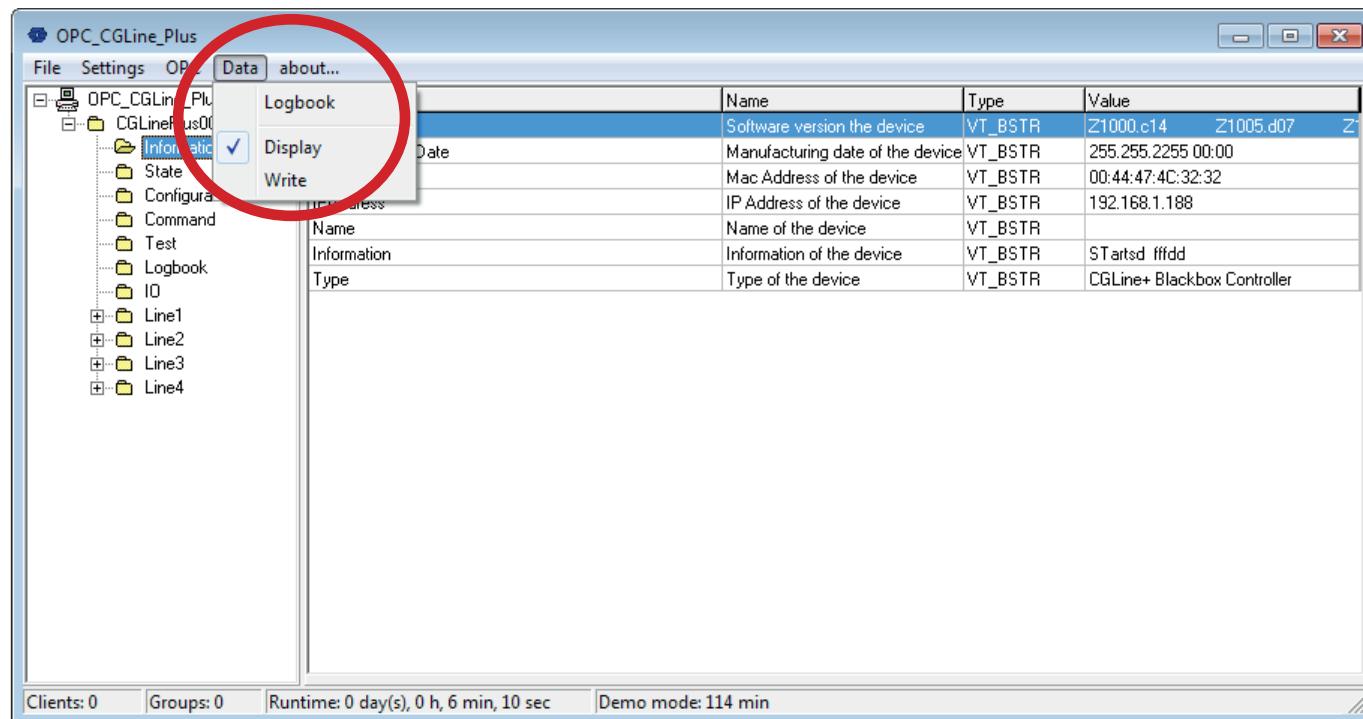
Click on “OK” to validate the values and restart CGLine Plus OPC Server to save the configuration.

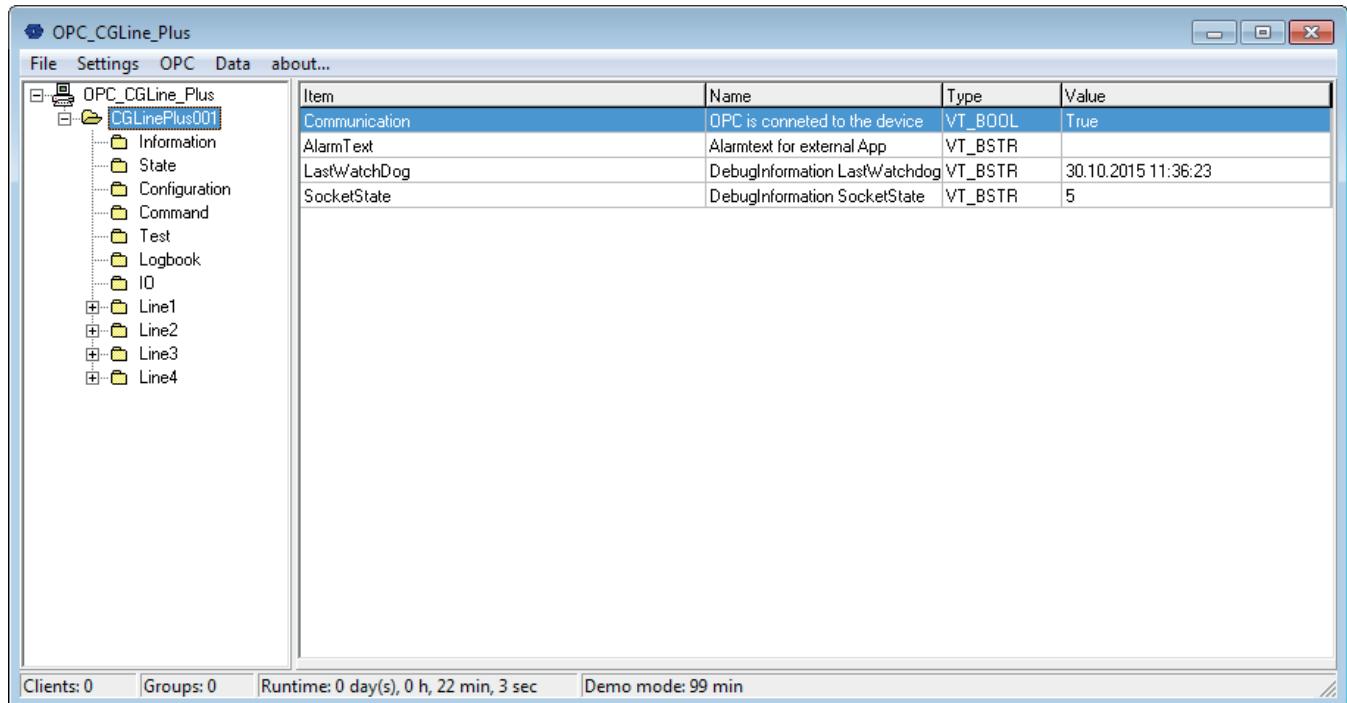
CGLine Plus OPC Server – Connect/Add CGLine+ Web-Controller

The new system will be shown in the device tree after restart of the OPC server..



Activate "Display" to view the values of the datapoints.

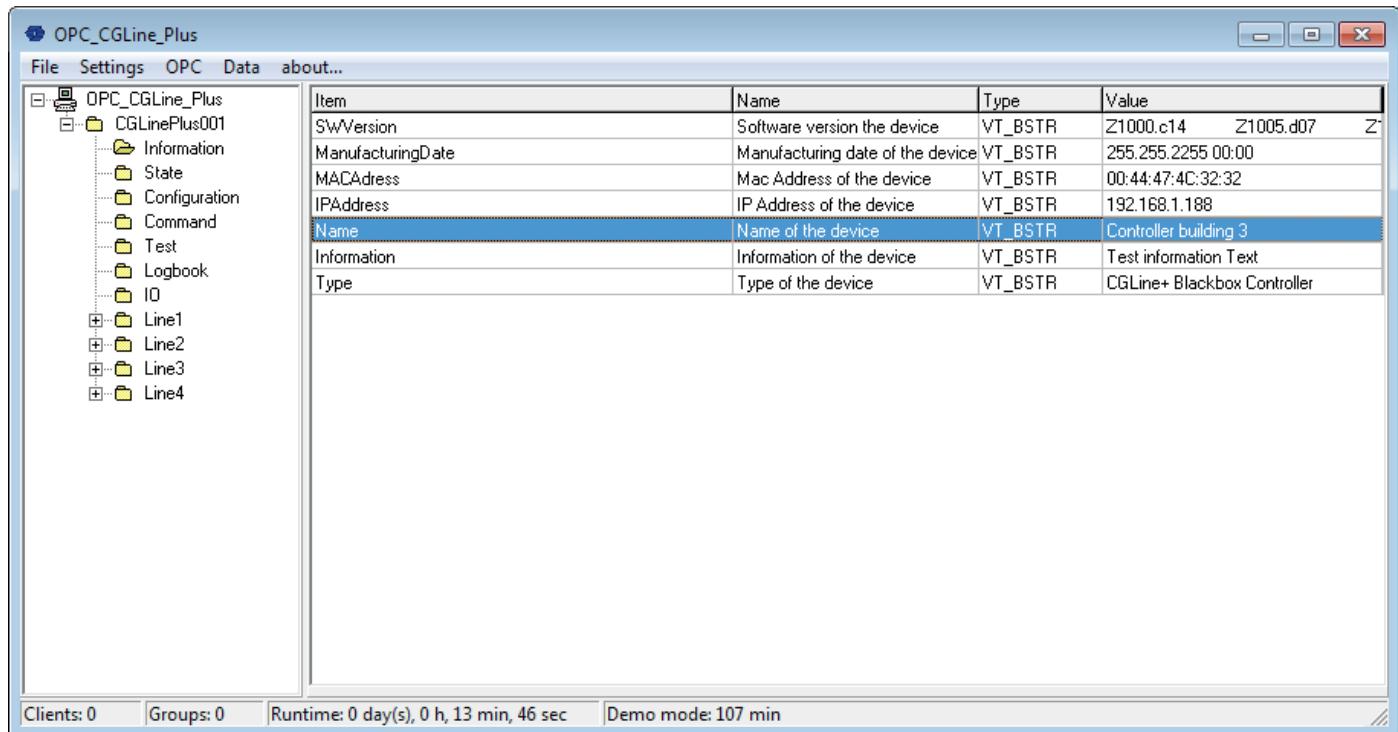




Description :

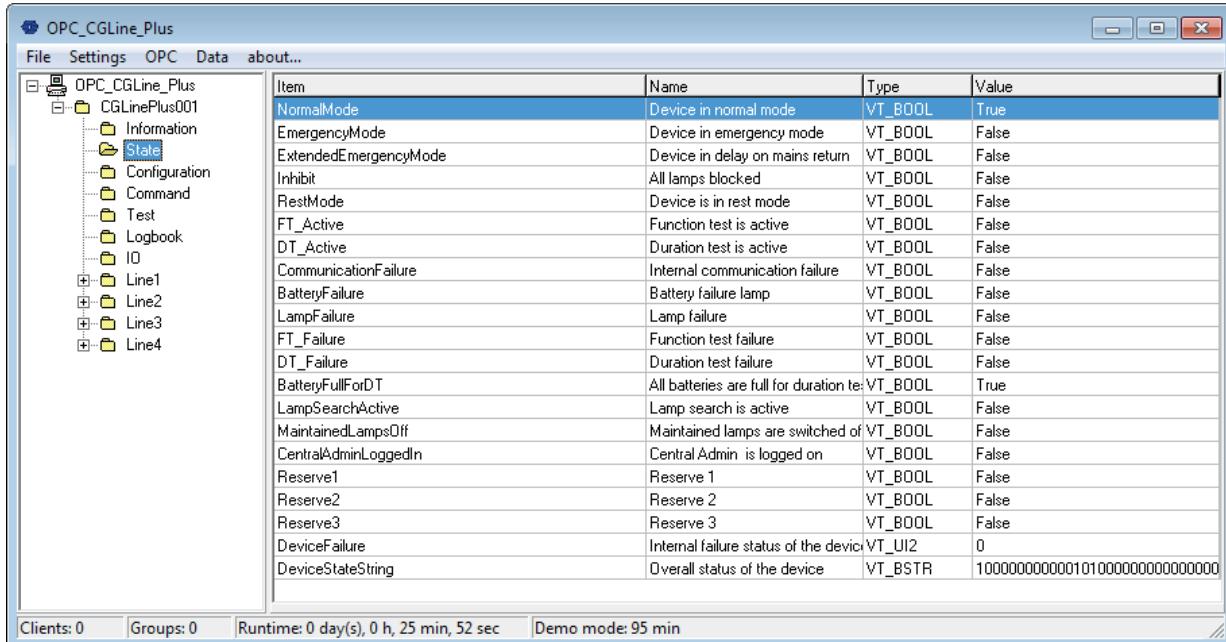
| OPC-Datapoint | Datapoint Type | OPC Type | Read / Write | Format | Command field OPC Server |
|---------------|----------------|----------|--------------|--------------|--------------------------------|
| COMMUNICATION | BOOLEAN | VT_BOOL | R | TRUE / FALSE | OPC IS CONNECTED TO THE DEVICE |
| ALARMTEXT | STRING | VT_BSTR | R / W | | NOT USED |
| LASTWATCHDOG | STRING | VT_BSTR | R | | DEBUGINFORMATION LAST WATCHDOG |
| SOCKETSTATE | STRING | VT_BSTR | R | | DEBUGINFORMATION SOCKETSTATE |

CGLine Plus OPC Server – Information



Description:

| OPC-Datapoint | Datapoint Type | OPC Type | Read / Write | Format | Comment field OPC Server |
|-------------------|----------------|----------|--------------|-------------------|----------------------------------|
| SWVERSION | STRING | VT_BSTR | R | MAX 30 CHAR | SOFTWARE VERSION THE DEVICE |
| MANUFACTURINGDATE | STRING | VT_BSTR | R | DD.MM.YYYY | MANUFACTURING DATE OF THE DEVICE |
| MACADDRESS | STRING | VT_BSTR | R | XX.XX.XX.XX.XX.XX | MAC ADDRESS OF THE DEVICE |
| IPADDRESS | STRING | VT_BSTR | R | XXX.XXX.XXX.XXX | IP ADDRESS OF THE DEVICE |
| NAME | STRING | VT_BSTR | R/W | 40 CHAR. | NAME OF THE DEVICE |
| INFORMATION | STRING | VT_BSTR | R/W | 255 CHARACTERS | INFORMATION OF THE DEVICE |
| TYPE | STRING | VT_BSTR | R | MAX. 40 CHAR. | TYPE OF THE DEVICE |



Description :

| OPC-Datapoint | Datapoint Type | OPC Type | Read / Write | Format | Command field OPC Server |
|-----------------------|----------------|----------|--------------|--------------|--|
| NORMALMODE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | DEVICE IN NORMAL MODE |
| EMERGENCYMODE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | DEVICE IN EMERGENCY MODE |
| EXTENDEDEMERGENCYMODE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | DEVICE IN DELAY ON MAINS RETURN |
| INHIBIT | BOOLEAN | VT_BOOL | R | TRUE/FALSE | DEVICE IS IN INHIBIT MODE |
| RESTMODE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | DEVICE IS IN REST MODE |
| FT_ACTIVE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | FUNCTION TEST IS ACTIVE |
| DT_ACTIVE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | DURATION TEST IS ACTIVE |
| COMMUNICATIONFAILURE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | INTERNAL COMMUNICATION FAILURE |
| BATTERYFAILURE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | BATTERY FAILURE LAMP |
| LAMPFAILURE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | LAMP FAILURE |
| FT_FAILURE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | FUNCTION TEST FAILURE |
| DT_FAILURE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | DURATION TEST FAILURE |
| BATTERYFULLFORT | BOOLEAN | VT_BOOL | R | TRUE/FALSE | ALL BATTERIES ARE FULL FOR DURATION TEST |
| LAMPSEARCHACTIVE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | LAMP SEARCH IS ACTIVE |
| MAINTAINEDLAMPOFF | BOOLEAN | VT_BOOL | R | TRUE/FALSE | MAINTAINED LAMPS ARE SWITCHED OFF |
| CENTRALADMINLOGGEDIN | BOOLEAN | VT_BOOL | R | TRUE/FALSE | CENTRAL ADMIN IS LOGGED ON |
| RESERVE1 | BOOLEAN | VT_BOOL | R | TRUE/FALSE | DT PENDING |
| RESERVE2 | BOOLEAN | VT_BOOL | R | TRUE/FALSE | FT PENDING |
| RESERVE3 | BOOLEAN | VT_BOOL | R | TRUE/FALSE | LINE OVER CURRENT |
| DEVICEFAILURE | UINT16 | VT_UI2 | R | | INTERNAL FAILURE STATUS OF THE DEVICE |
| DEVICESTATESTRING | STRING | VT_BSTR | R | 40 CHARACTER | OVER ALL STATUS OF THE DEVICE |

CGLine Plus OPC Server – Command

The screenshot shows the OPC_CGLine_Plus software interface. The title bar reads "OPC_CGLine_Plus". The menu bar includes "File", "Settings", "OPC", "Data", and "about...". The left sidebar displays a tree view of the device structure:

- OPC_CGLine_Plus
- CGLinePlus001
 - Information
 - State
 - Configuration
 - Command
 - Test
 - Logbook
 - IO
 - Line1
 - Line2
 - Line3
 - Line4

The main area contains a table titled "Item" with columns "Name", "Type", and "Value". The table lists various commands and their details:

| Item | Name | Type | Value |
|--------------------------|---|---------|-------|
| QueryDeviceState | Query device state | VT_BOOL | False |
| FT_Start | Start function test line, zone, lamp, test gr | VT_BSTR | |
| DT_Start | Start duration test line, zone, lamp, test gr | VT_BSTR | |
| TestStop | Stop all tests | VT_BSTR | |
| SetInhibit | Inhibit lamps | VT_BSTR | |
| ResetInhibit | Release lamps | VT_BSTR | |
| SetRestMode | Set lamps to rest mode | VT_BSTR | |
| SwitchMaintainedLampsOff | Switch all maintained lamps off | VT_BSTR | |
| SwitchMaintainedLampsOn | Switch all maintained lamps on | VT_BSTR | |
| SearchLampsComplete | Search all lamps | VT_UI2 | 0 |
| SearchLampsDifferential | Search new lamps | VT_UI2 | 0 |
| GPCommand | GP-Command for special data | VT_BSTR | |
| ResetLamps | Reset Lamps to delivery state | VT_BSTR | |

At the bottom, there are status indicators: "Clients: 0", "Groups: 0", "Runtime: 0 day(s), 0 h, 40 min, 58 sec", and "Demo mode: 80 min".

Description:

| OPC-Datapoint | Datapoint Type | OPC Type | Read / Write | Format | Command field OPC Server |
|-------------------------|-----------------------|-----------------|---------------------|--------------------------------|--|
| QUERYDEVICESTATE | BOOLEAN | VT_BOOL | W | TRUE/FALSE | QUERY DEVICE STATE |
| FT_START | STRING | VT_BSTR | W | XYYZZT | START FUNCTION TEST LINE, ZONE, LAMP, TEST GROUP X = LINE: 1..2; F=ALL YY = ZONE: 1..16; FF=ALL; 0=NOT USED ZZZ = LAMP IN ZONE: 1..100; FFF=ALL; 0=NOT USED T = TEST GROUP: 1..8; 0=NOT USED |
| DT_START | STRING | VT_BSTR | W | XYYZZT | START DURATION TEST LINE, ZONE, LAMP, TEST GROUP X = LINE: 1..2; F=ALL YY = ZONE: 1..16; FF=ALL; 0=NOT USED ZZZ = LAMP IN ZONE: 1..100; FFF=ALL; 0=NOT USED T = TEST GROUP: 1..8; 0=NOT USED |
| TESTSTOP | STRING | VT_BSTR | W | XYYZZT | STOP TEST FOR LINE, ZONE, LAMP, TEST GROUP X = LINE: 1..2; F=ALL YY = ZONE: 1..16; FF=ALL; 0=NOT USED ZZZ = LAMP IN ZONE: 1..100; FFF=ALL; 0=NOT USED T = TEST GROUP: 1..8; 0=NOT USED |
| SETINHIBIT | STRING | VT_BSTR | W | XYYZZ | INHIBIT ALL LAMPS X = LINE: 1..2; F=ALL YY = ZONE: 1..16; FF=ALL; 0=NOT USED ZZZ = LAMP IN ZONE: 1..100; FFF=ALL; 0=NOT USED |
| RESETINHIBIT | STRING | VT_BSTR | W | XYYZZ | RELEASE ALL LAMPS X = LINE: 1..2; F=ALL YY = ZONE: 1..16; FF=ALL; 0=NOT USED ZZZ = LAMP IN ZONE: 1..100; FFF=ALL; 0=NOT USED |
| SETRESTMODE | STRING | VT_BSTR | W | XYYZZ | RELEASE REST MODE X = LINE: 1..2; F=ALL YY = ZONE: 1..16; FF=ALL; 0=NOT USED ZZZ = LAMP IN ZONE: 1..100; FFF=ALL; 0=NOT USED |
| SWITCHMAINTAINEDLAMPOFF | STRING | VT_BSTR | W | XYYZZ | SWITCH ALL MAINTAINED LAMPS OFF X = LINE: 1..2; F=ALL YY = ZONE: 1..16; FF=ALL; 0=NOT USED ZZZ = LAMP IN ZONE: 1..100; FFF=ALL; 0=NOT USED |
| SWITCHMAINTAINEDLAMPSON | STRING | VT_BSTR | W | XYYZZ | SWITCH ALL MAINTAINED LAMPS ON X = LINE: 1..2; F=ALL YY = ZONE: 1..16; FF=ALL; 0=NOT USED ZZZ = LAMP IN ZONE: 1..100; FFF=ALL; 0=NOT USED |
| SEARCHLAMPSCOMPLETE | UINT16 | VT_UI2 | W | 1=LINE 1, 2=LINE2, 0xFF=ALL | SEARCH ALL LAMPS |
| SEARCHLAMPSDIFFERENTIAL | UINT16 | VT_UI2 | W | 1=LINE 1, 2=LINE2, 0xFF=ALL | SEARCH NEW LAMPS |
| GPCOMMAND | STRING | VT_BSTR | W | | |
| RESETLAMPS | STRING | VT_BSTR | W | | RESET LAMPS TO DELIVERY STATE |

CGLine Plus OPC Server – Test

The screenshot shows the OPC_CGLine_Plus software interface. The menu bar includes File, Settings, OPC, Data, and about... The main window has a tree view on the left and a table view on the right.

Tree View (Left):

- OPC_CGLine_Plus
- CGLinePlus001
 - Information
 - State
 - Configuration
 - Command
 - Test (selected)
 - Logbook
 - IO
- Line1
- Line2
- Line3
- Line4

Table View (Right):

| Item | Name | Type | Value |
|--------------|---|---------|---------------------------|
| FT_CfgGroup1 | FT: time, date and distance of test group | VT_BSTR | 30.10.2015 15:01:00 (001) |
| FT_CfgGroup2 | FT: time, date and distance of test group | VT_BSTR | 30.10.2015 20:00:00 (002) |
| FT_CfgGroup3 | FT: time, date and distance of test group | VT_BSTR | 21.01.2017 18:00:00 (001) |
| FT_CfgGroup4 | FT: time, date and distance of test group | VT_BSTR | 20.01.2018 20:00:00 (002) |
| FT_CfgGroup5 | FT: time, date and distance of test group | VT_BSTR | 20.01.2019 18:45:00 (001) |
| FT_CfgGroup6 | FT: time, date and distance of test group | VT_BSTR | 30.10.2015 18:22:00 (001) |
| FT_CfgGroup7 | FT: time, date and distance of test group | VT_BSTR | 30.10.2015 18:00:00 (001) |
| FT_CfgGroup8 | FT: time, date and distance of test group | VT_BSTR | 30.10.2015 18:00:00 (001) |
| DT_CfgGroup1 | DT: time, date and distance of test group | VT_BSTR | 07.11.2015 04:33:00 (030) |
| DT_CfgGroup2 | DT: time, date and distance of test group | VT_BSTR | 07.11.2015 09:33:00 (030) |
| DT_CfgGroup3 | DT: time, date and distance of test group | VT_BSTR | 21.11.2015 10:33:00 (030) |
| DT_CfgGroup4 | DT: time, date and distance of test group | VT_BSTR | 14.02.2016 12:33:00 (030) |
| DT_CfgGroup5 | DT: time, date and distance of test group | VT_BSTR | 13.02.2017 14:33:00 (030) |
| DT_CfgGroup6 | DT: time, date and distance of test group | VT_BSTR | 31.01.2018 16:33:00 (030) |
| DT_CfgGroup7 | DT: time, date and distance of test group | VT_BSTR | 13.02.2019 18:33:00 (030) |
| DT_CfgGroup8 | DT: time, date and distance of test group | VT_BSTR | 25.11.2015 16:33:00 (030) |

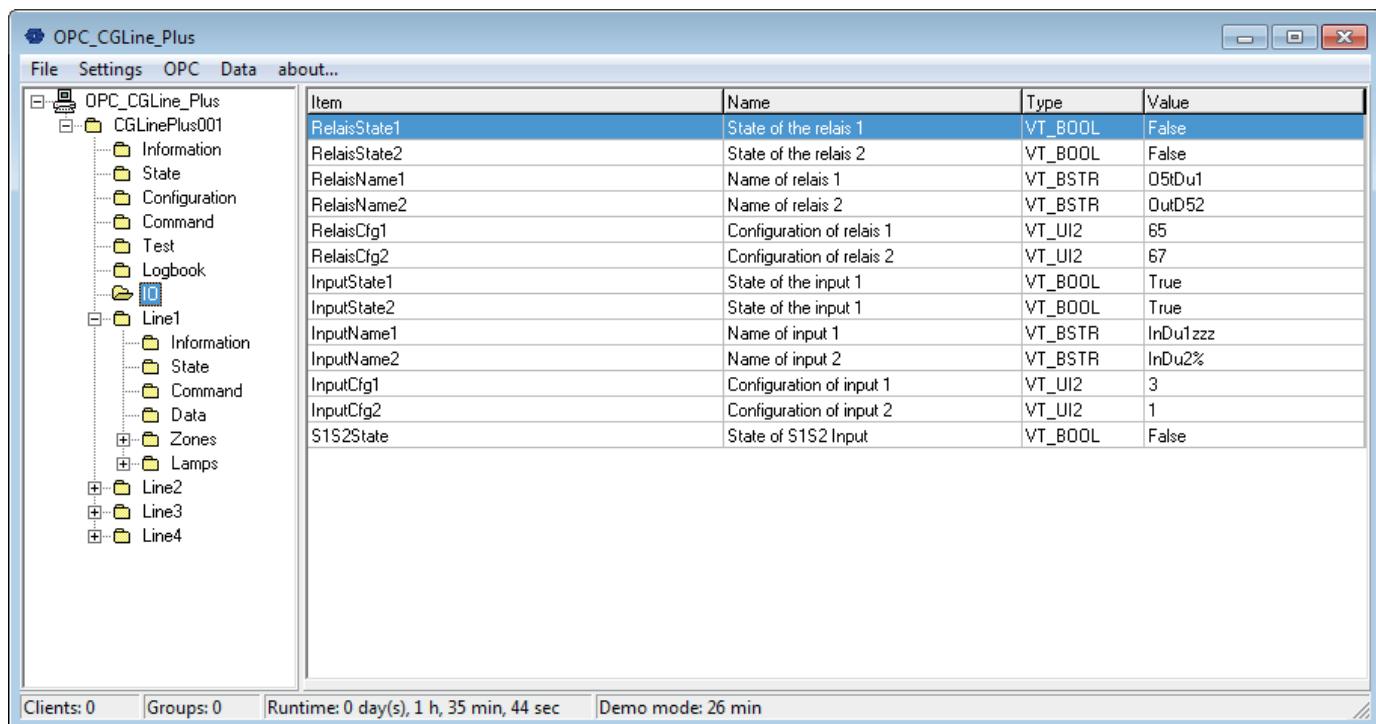
Bottom Status Bar:

Clients: 0 Groups: 0 Runtime: 0 day(s), 1 h, 24 min, 36 sec Demo mode: 37 min

Description:

| OPC-Datapoint | Datapoint Type | OPC Type | Read / Write | Format | Command field OPC Server |
|----------------------|-----------------------|-----------------|---------------------|------------------------------|--|
| FT_CFGGROUP1 | STRING | VT_BSTR | R/W | DD.MM.YYYY HH:MM:SS (XX) | FT: TIME, DATE AND DISTANCE OF TEST GROUP 1 (DD. MM.YYYY HH:MM:SS (XX)) , XX = DISTANCE IN DAYS (1..30) |
| FT_CFGGROUP2 | STRING | VT_BSTR | R/W | DD.MM.YYYY HH:MM:SS (XX) | FT: TIME, DATE AND DISTANCE OF TEST GROUP 2 (DD. MM.YYYY HH:MM:SS (XX)) , XX = DISTANCE IN DAYS (1..30) |
| FT_CFGGROUP3 | STRING | VT_BSTR | R/W | DD.MM.YYYY HH:MM:SS (XX) | FT: TIME, DATE AND DISTANCE OF TEST GROUP 3 (DD. MM.YYYY HH:MM:SS (XX)) , XX = DISTANCE IN DAYS (1..30) |
| FT_CFGGROUP4 | STRING | VT_BSTR | R/W | DD.MM.YYYY HH:MM:SS (XX) | FT: TIME, DATE AND DISTANCE OF TEST GROUP 4 (DD. MM.YYYY HH:MM:SS (XX)) , XX = DISTANCE IN DAYS (1..30) |
| FT_CFGGROUP5 | STRING | VT_BSTR | R/W | DD.MM.YYYY HH:MM:SS (XX) | FT: TIME, DATE AND DISTANCE OF TEST GROUP 5 (DD. MM.YYYY HH:MM:SS (XX)) , XX = DISTANCE IN DAYS (1..30) |
| FT_CFGGROUP6 | STRING | VT_BSTR | R/W | DD.MM.YYYY HH:MM:SS (XX) | FT: TIME, DATE AND DISTANCE OF TEST GROUP 6 (DD. MM.YYYY HH:MM:SS (XX)) , XX = DISTANCE IN DAYS (1..30) |
| FT_CFGGROUP7 | STRING | VT_BSTR | R/W | DD.MM.YYYY HH:MM:SS (XX) | FT: TIME, DATE AND DISTANCE OF TEST GROUP 7 (DD. MM.YYYY HH:MM:SS (XX)) , XX = DISTANCE IN DAYS (1..30) |
| FT_CFGGROUP8 | STRING | VT_BSTR | R/W | DD.MM.YYYY HH:MM:SS (XX) | FT: TIME, DATE AND DISTANCE OF TEST GROUP 8 (DD. MM.YYYY HH:MM:SS (XX)) , XX = DISTANCE IN DAYS (1..30) |
| DT_CFGGROUP1 | STRING | VT_BSTR | R/W | DD.MM.YYYY HH:MM:SS (ZZZ) | DT: TIME, DATE AND DISTANCE OF TEST GROUP 1 (DD. MM.YYYY HH:MM:SS (ZZZ)) , ZZZ = DISTANCE IN DAYS (1..365) |
| DT_CFGGROUP2 | STRING | VT_BSTR | R/W | DD.MM.YYYY HH:MM:SS (ZZZ) | DT: TIME, DATE AND DISTANCE OF TEST GROUP 2 (DD. MM.YYYY HH:MM:SS (ZZZ)) , ZZZ = DISTANCE IN DAYS (1..365) |
| DT_CFGGROUP3 | STRING | VT_BSTR | R/W | DD.MM.YYYY HH:MM:SS (ZZZ) | DT: TIME, DATE AND DISTANCE OF TEST GROUP 3 (DD. MM.YYYY HH:MM:SS (ZZZ)) , ZZZ = DISTANCE IN DAYS (1..365) |
| DT_CFGGROUP4 | STRING | VT_BSTR | R/W | DD.MM.YYYY HH:MM:SS (ZZZ) | DT: TIME, DATE AND DISTANCE OF TEST GROUP 4 (DD. MM.YYYY HH:MM:SS (ZZZ)) , ZZZ = DISTANCE IN DAYS (1..365) |
| DT_CFGGROUP5 | STRING | VT_BSTR | R/W | DD.MM.YYYY HH:MM:SS (ZZZ) | DT: TIME, DATE AND DISTANCE OF TEST GROUP 5 (DD. MM.YYYY HH:MM:SS (ZZZ)) , ZZZ = DISTANCE IN DAYS (1..365) |
| DT_CFGGROUP6 | STRING | VT_BSTR | R/W | DD.MM.YYYY HH:MM:SS (ZZZ) | DT: TIME, DATE AND DISTANCE OF TEST GROUP 6 (DD. MM.YYYY HH:MM:SS (ZZZ)) |
| DT_CFGGROUP7 | STRING | VT_BSTR | R/W | DD.MM.YYYY HH:MM:SS (ZZZ) | DT: TIME, DATE AND DISTANCE OF TEST GROUP 7 (DD. MM.YYYY HH:MM:SS (ZZZ)) , ZZZ = DISTANCE IN DAYS (1..365) |
| DT_CFGGROUP8 | STRING | VT_BSTR | R/W | DD.MM.YYYY HH:MM:SS (ZZZ) | DT: TIME, DATE AND DISTANCE OF TEST GROUP 8 (DD. MM.YYYY HH:MM:SS (ZZZ)) , ZZZ = DISTANCE IN DAYS (1..365) |

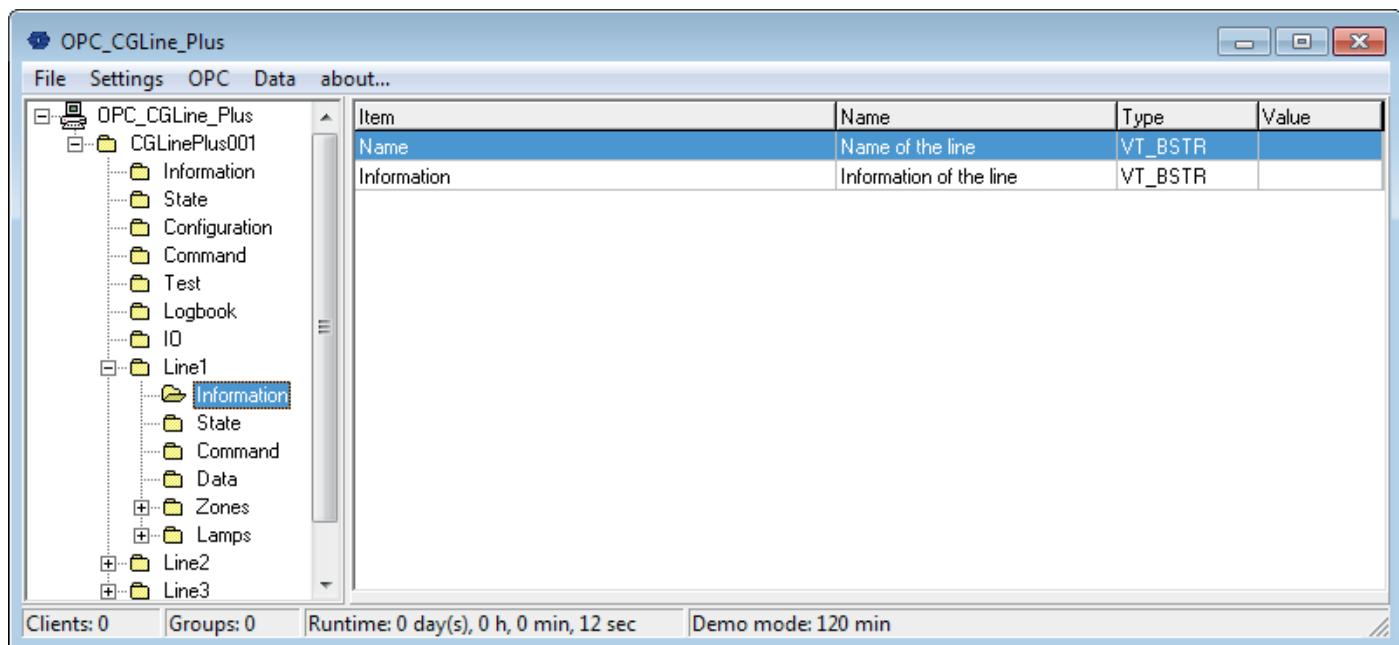
CGLine Plus OPC Server – IO



Description:

| OPC-Datapoint | Datapoint Type | OPC Type | Read / Write | Format | Command field OPC Server |
|---------------|----------------|----------|--------------|---------------|---------------------------|
| RelaisState1 | Boolean | VT_BOOL | R | True/False | State of the relais 1 |
| RelaisState2 | Boolean | VT_BOOL | R | True/False | State of the relais 2 |
| RelaisName1 | String | VT_BSTR | R/W | 20 characters | Name of relais 1 |
| RelaisName2 | String | VT_BSTR | R/W | 20 characters | Name of relais 2 |
| RelaisCfg1 | UInt16 | VT_UI2 | R/W | | Configuration of relais 1 |
| RelaisCfg2 | UInt16 | VT_UI2 | R/W | | Configuration of relais 2 |
| InputState1 | Boolean | VT_BOOL | R | True/False | State of the input 1 |
| InputState2 | Boolean | VT_BOOL | R | True/False | State of the input 2 |
| InputName1 | String | VT_BSTR | R/W | 20 characters | Name of input 1 |
| InputName2 | String | VT_BSTR | R/W | 20 characters | Name of input 2 |
| InputCfg1 | UInt16 | VT_UI2 | R/W | | Configuration of input 1 |
| InputCfg2 | UInt16 | VT_UI2 | R/W | | Configuration of input 2 |

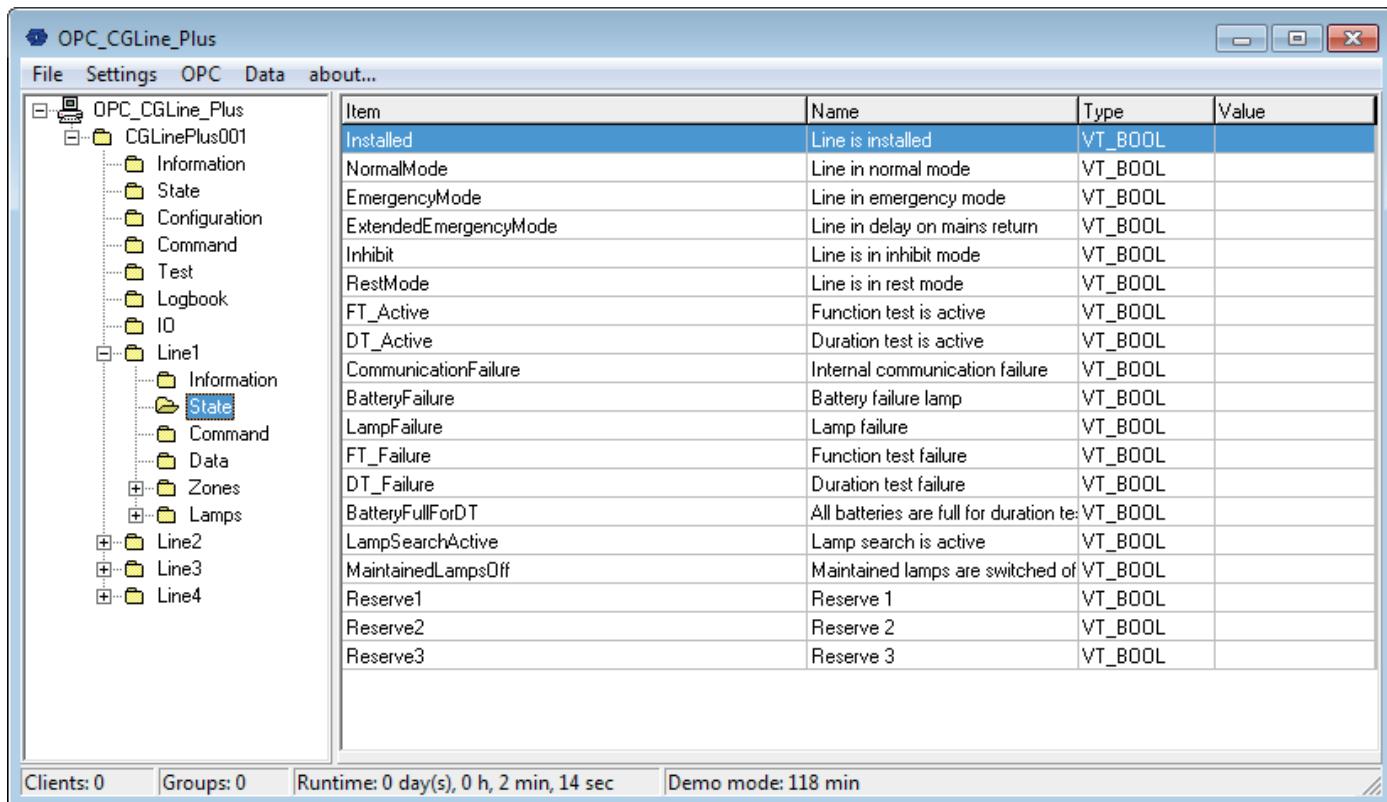
CGLine Plus OPC Server – LineX (1-4) - Information



Description:

| OPC-Datapoint | Datapoint Type | OPC Type | Read / Write | Format | Command field OPC Server |
|---------------|----------------|----------|--------------|---------------|--------------------------|
| NAME | STRING | VT_BSTR | R/W | 20 CHARACTER | NAME OF THE LINE |
| INFORMATION | STRING | VT_BSTR | R/W | 255 CHARACTER | INFORMATION OF THE LINE |

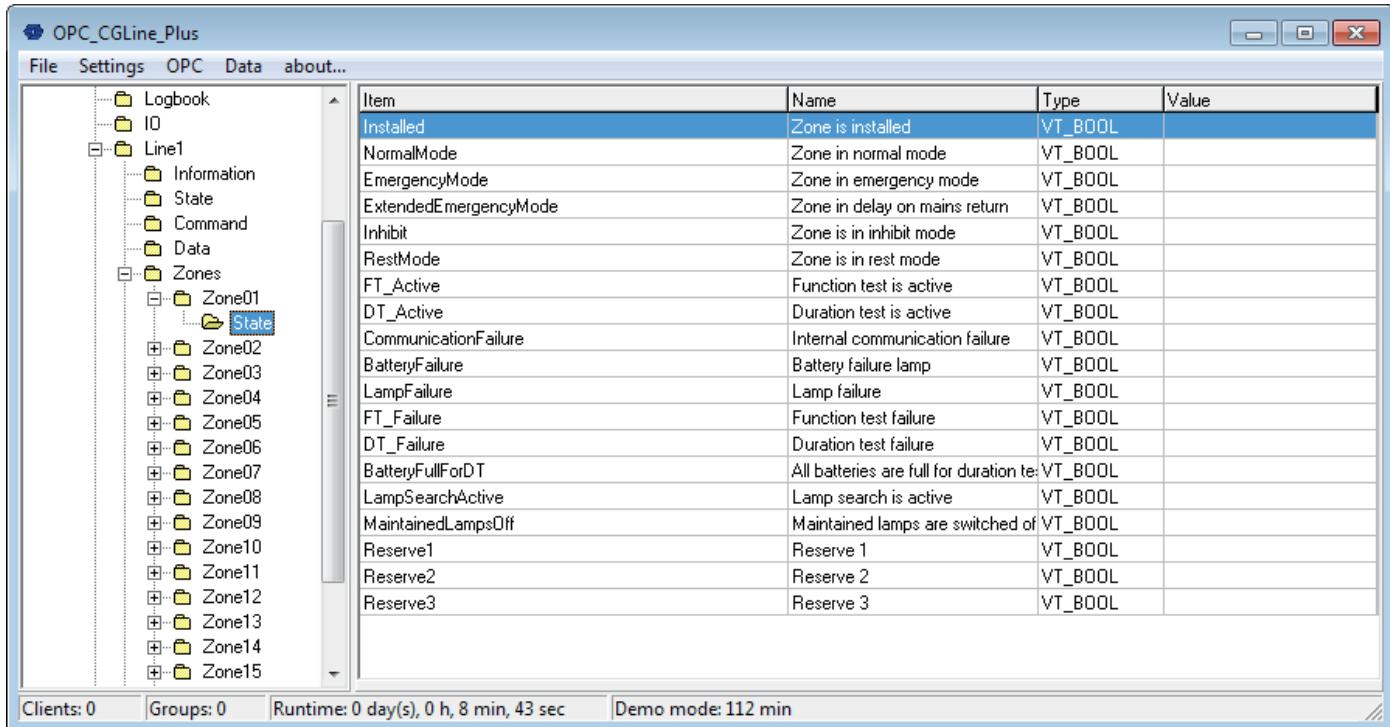
CGLine Plus OPC Server – LineX (1-4) - State



Description:

| OPC-Datapoint | Datapoint Type | OPC Type | Read / Write | Format | Command field OPC Server |
|----------------------|----------------|----------|--------------|------------|--|
| INSTALLED | BOOLEAN | VT_BOOL | R | TRUE/FALSE | LINE IS INSTALLED |
| NORMALMODE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | LINE IN NORMAL MODE |
| EMERGENCYMODE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | LINE IN EMERGENCY MODE |
| EXTENDEDERGENCYMODE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | LINE IN DELAY ON MAINS RETURN |
| INHIBIT | BOOLEAN | VT_BOOL | R | TRUE/FALSE | LINE IS IN INHIBIT MODE |
| RESTMODE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | LINE IS IN REST MODE |
| FT_ACTIVE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | FUNCTION TEST IS ACTIVE |
| DT_ACTIVE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | DURATION TEST IS ACTIVE |
| COMMUNICATIONFAILURE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | INTERNAL COMMUNICATION FAILURE |
| BATTERYFAILURE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | BATTERY FAILURE LAMP |
| LAMPFailure | BOOLEAN | VT_BOOL | R | TRUE/FALSE | LAMP FAILURE |
| FT_FAILURE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | FUNCTION TEST FAILURE |
| DT_FAILURE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | DURATION TEST FAILURE |
| BATTERYFULLFORDT | BOOLEAN | VT_BOOL | R | TRUE/FALSE | ALL BATTERIES ARE FULL FOR DURATION TEST |
| LAMPSEARCHACTIVE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | LAMP SEARCH IS ACTIVE |
| MAINTAINEDLAMPSOFF | BOOLEAN | VT_BOOL | R | TRUE/FALSE | MAINTAINED LAMPS ARE SWITCHED OFF |
| RESERVE1 | BOOLEAN | VT_BOOL | R | TRUE/FALSE | DT PENDING |
| RESERVE2 | BOOLEAN | VT_BOOL | R | TRUE/FALSE | FT PENDING |
| RESERVE3 | BOOLEAN | VT_BOOL | R | TRUE/FALSE | LINE OVER CURRENT |

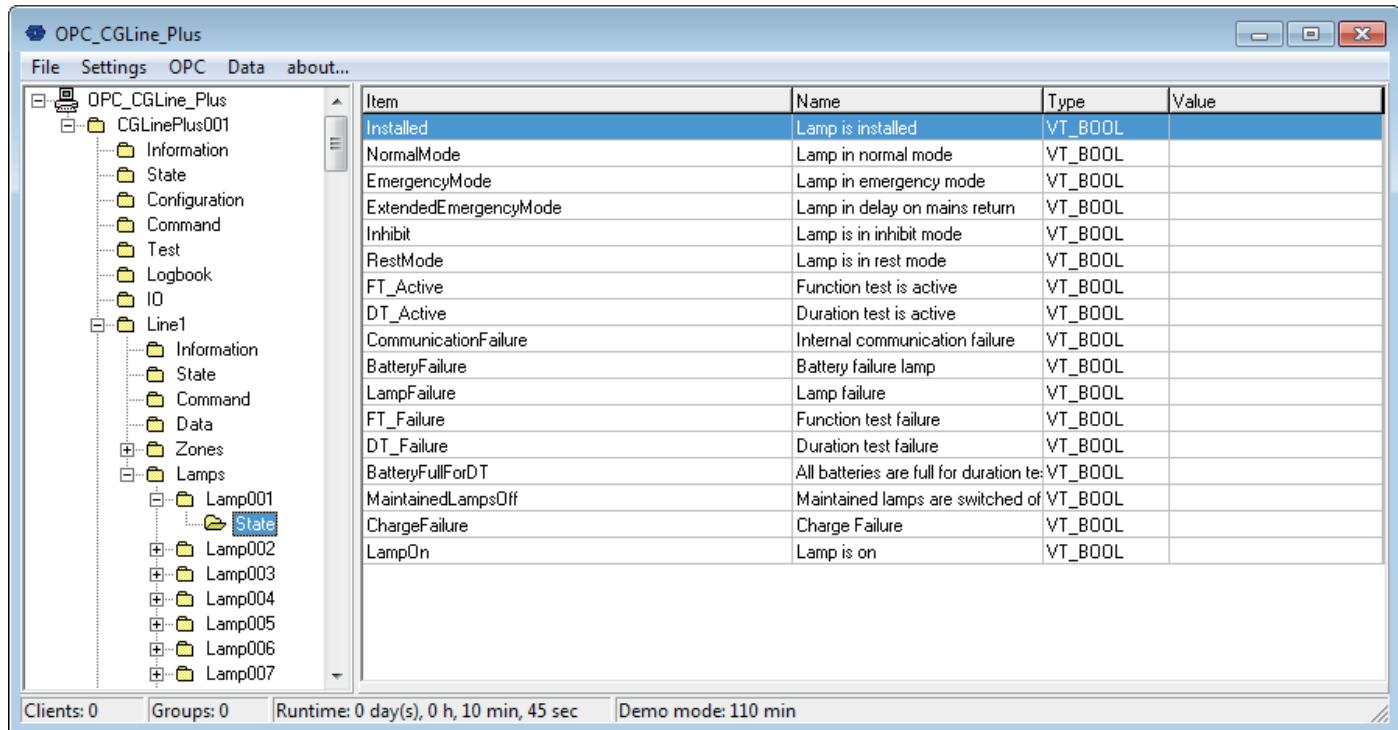
CGLine Plus OPC Server – LineX (1-4) – ZoneY (1-16) – State



Description :

| OPC-Datapoint | Datapoint Type | OPC Type | Read / Write | Format | Command field OPC Server |
|------------------------|----------------|----------|--------------|------------|--|
| INSTALLED | BOOLEAN | VT_BOOL | R | TRUE/FALSE | ZONE IS INSTALLED |
| NORMALMODE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | ZONE IN NORMAL MODE |
| EMERGENCYMODE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | ZONE IN EMERGENCY MODE |
| EXTENDEDDEMERGENCYMODE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | ZONE IN DELAY ON MAINS RETURN |
| INHIBIT | BOOLEAN | VT_BOOL | R | TRUE/FALSE | ZONE IS IN INHIBIT MODE |
| RESTMODE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | ZONE IS IN REST MODE |
| FT_ACTIVE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | FUNCTION TEST IS ACTIVE |
| DT_ACTIVE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | DURATION TEST IS ACTIVE |
| COMMUNICATIONFAILURE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | INTERNAL COMMUNICATION FAILURE |
| BATTERYFAILURE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | BATTERY FAILURE LAMP |
| LAMPFailure | BOOLEAN | VT_BOOL | R | TRUE/FALSE | LAMP FAILURE |
| FT_FAILURE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | FUNCTION TEST FAILURE |
| DT_FAILURE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | DURATION TEST FAILURE |
| BATTERYFULLFORDT | BOOLEAN | VT_BOOL | R | TRUE/FALSE | ALL BATTERIES ARE FULL FOR DURATION TEST |
| LAMPSEARCHACTIVE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | LAMP SEARCH IS ACTIVE |
| MAINTAINEDLAMPOFF | BOOLEAN | VT_BOOL | R | TRUE/FALSE | MAINTAINED LAMPS ARE SWITCHED OFF |
| RESERVE1 | BOOLEAN | VT_BOOL | R | TRUE/FALSE | RESERVE 1 |
| RESERVE2 | BOOLEAN | VT_BOOL | R | TRUE/FALSE | RESERVE 2 |
| RESERVE3 | BOOLEAN | VT_BOOL | R | TRUE/FALSE | RESERVE 3 |

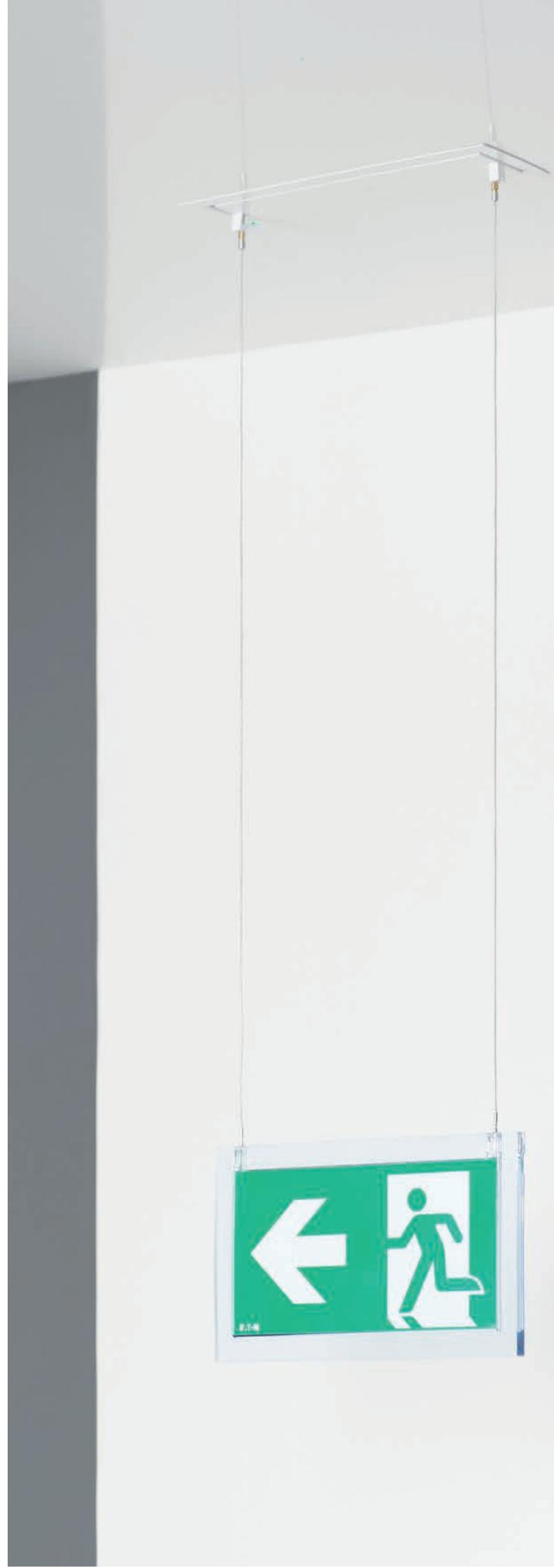
CGLine Plus OPC Server – LineX (1-4) - LampsZ (1-400) - State



Description :

| OPC-Datapoint | Datapoint Type | OPC Type | Read / Write | Format | Command field OPC Server |
|-----------------------|----------------|----------|--------------|------------|-------------------------------------|
| INSTALLED | BOOLEAN | VT_BOOL | R | TRUE/FALSE | LAMP IS INSTALLED |
| NORMALMODE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | LAMP IN NORMAL MODE |
| EMERGENCYMODE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | LAMP IN EMERGENCY MODE |
| EXTENDEDEMERGENCYMODE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | LAMP IN DELAY ON MAINS RETURN |
| INHIBIT | BOOLEAN | VT_BOOL | R | TRUE/FALSE | LAMP IS IN INHIBIT MODE |
| RESTMODE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | LAMP IS IN REST MODE |
| FT_ACTIVE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | FUNCTION TEST IS ACTIVE |
| DT_ACTIVE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | DURATION TEST IS ACTIVE |
| COMMUNICATIONFAILURE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | INTERNAL COMMUNICATION FAILURE |
| BATTERYFAILURE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | BATTERY FAILURE LAMP |
| LAMPFAILURE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | LAMP FAILURE |
| FT_FAILURE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | FUNCTION TEST FAILURE |
| DT_FAILURE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | DURATION TEST FAILURE |
| BATTERYFULLFORTD | BOOLEAN | VT_BOOL | R | TRUE/FALSE | BATTERIE ARE FULL FOR DURATION TEST |
| MAINTAINEDLAMPSOFF | BOOLEAN | VT_BOOL | R | TRUE/FALSE | MAINTAINED LAMPS ARE SWITCHED OFF |
| CHARGEFAILURE | BOOLEAN | VT_BOOL | R | TRUE/FALSE | CHARGE FAILURE |
| LAMPON | BOOLEAN | VT_BOOL | R | TRUE/FALSE | LAMP IS ON |

Notes



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