

## DLMS EXPLORER V1.2

### About DLMS Explorer

DLMS Explorer is a windows DLMS Client application with OPC Data access V3.0 Server interface encapsulating a full-fledged DLMS/COSEM Client driver, with multi-channel and multi-device capabilities. On the OPC side the product is conformant to the latest version of OPC (V3.0), supporting intuitive features like structured/flat browsing hierarchies, configurable grouping of data for different scan rates, demand-scanning etc. On the DLMS side, the client driver provides a binary version of Kalki's popular DLMS Source Code Library (DLMS SCL) with the latest features.

Kalki with many years of expertise in DLMS introduces an OPC Server for DLMS compliant devices, a ready-to-use solution for meter reading applications.

Key features of DLMS Explorer

#### OPC Server

- Compliant to latest version (3.0) of OPC
- Support to structured and flat browsing
- Configurable groups
- OPC Read
  - Demand scan
  - Periodic scan
  - Refresh on startup
- OPC Write

### User Interface

#### Configuration GUI

Configuration GUI allows user to specify details of DLMS Servers required for communication. After configuring, user can download object list (list of all data inside the meter) and create groups by adding items (meter data) from the previously downloaded object list. These group items can be Read/Written either using DLMS Explorer itself or by an OPC Client (local/remote). Other key features of DLMS Explorer include:

- **Periodic scan:** User can configure DLMS Explorer to automatically read the data from meter and update the value in local display and cache.
- **Demand scan:** Whenever user invokes this feature, DLMS Explorer will read the data from meter and update the value in local display and cache.
- **Refresh on startup** This parameter if set to TRUE will cause to read group items from meter and update locally during every startup of DLMS Explorer
- **OPC write:** allows to write data into DLMS meter.

Apart from these, there will also be OPC tags to indicate result of previous Read/Write attempts.

---

---

## Data View

The Data view pane of User interface displays all OPC tags with associated value, time stamp, data type, access right and quality.

## Protocol analyzer

Protocol analyzer allows user to monitor message transaction (request/response frames) between DLMS Explorer and DLMS Server. This window displays the messages along with time-stamp, channel name, and direction (transmit/receive). In addition to communication frames between DLMS Explorer and DLMS Server (physical/link layer transactions), protocol analyzer also shows the message flow between various protocol layers inside DLMS Explorer (Data user layer, Application layer and Link layer).

## Physical Channels

- Direct HDLC(RS232/RS485/Optical)
- IEC 62056-21 Mode E (RS232/Optical)
- TCP/IP
- UDP
- Serial over IP(HDLC over IP network)
- PSTN modem

## DLMS Communication profiles

- HDLC (supports 1 Bytes/2 Bytes/4 Bytes addressing and link layer parameter negotiation)
- IP (Internet Protocol)

## DLMS/COSEM Application layer

- Logical name and Short name contexts.
- Lowest level and Low level (password) authentication.
- Read, Write, and Get, Set, Action, Block transfer, Selective / Parameterized access.

## Applications

- Ideal requirements for meter reading, providing out of the box connectivity in DLMS meters and devices.
- Universally accepted OPC interface to meter data.
- A handy tool for firmware developers and test engineers for DLMS meter validation.
- Meter reading applications
- DLMS Explorer enables applications such as AMR, Meter Parameterization softwares, SCADA to access DLMS meter data using the widely accepted OPC interface. The applications can readily connect to the DLMS Explorer using OPC and perform Read/Write DLMS meter data.
- DLMS Client tool - for server development and testing.
- DLMS Explorer will be a handy and cost effective tool if your need is limited to a DLMS Client tool for viewing/validating DLMS Server (meter) data. With its configuration GUI, Data view and Protocol analyzer, DLMS Explorer can be used as a stand alone application allowing user an easy mean for communicating with DLMS meter and also to monitor the data transactions.

---

---

### **Also Available!**

A fully-functional evaluation version for download, Kalkitech provides a never-before opportunity to use a real DLMS Client in your application before you buy.

### **For Details log-in**

<http://www.kalkitech.com/dlmsopcservr.htm>

### **Contact us at**

KALKI Communication Technologies  
Limited  
#147, Ananta Pushpa Building 5th Main  
Road HSR Sector 7,  
Bangalore 56 00 34, INDIA  
Telephone: +91-80-4052 7900  
Fax: +91-80-2572 5473  
E-mail: [sales\\_blr@kalkitech.com](mailto:sales_blr@kalkitech.com)