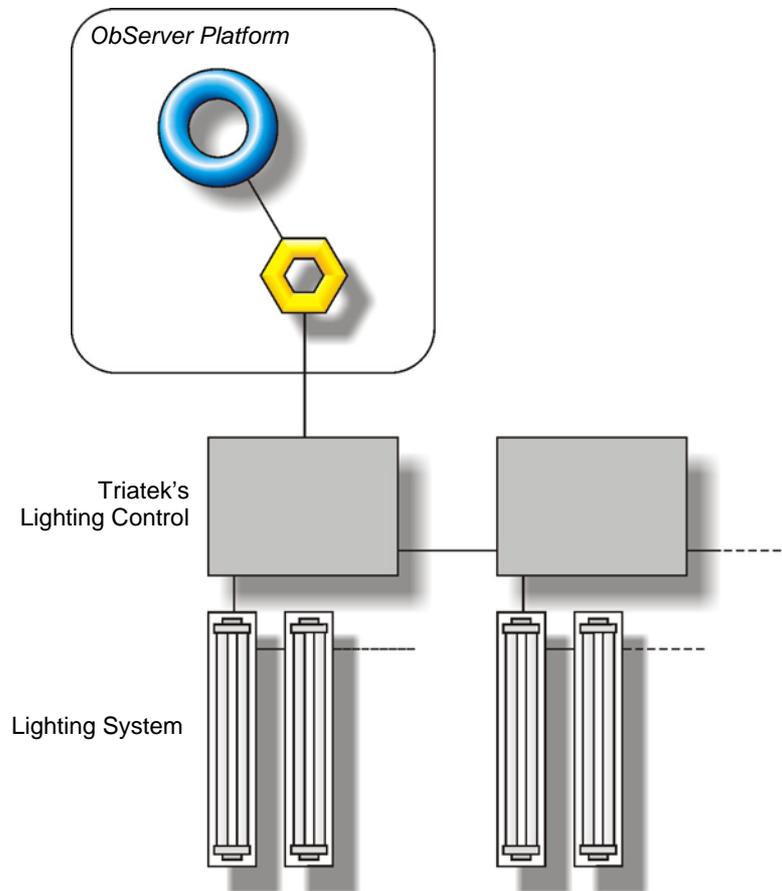# Product Engineering Guide

OSM v20 Triatek v10

Introduction

The Triatek OSM links Triatek's lighting control system to ObServer. Multiple lighting control panels can be addressed, each of which has a number if inputs and relay outputs which can be monitored and controlled via configurable lighting zones.

Supported Range

- Triatek LP-2500 Series – each panel has up to 120 inputs and 60 outputs
- Triatek LP-2600 Series – each panel has up to 120 inputs and 60 outputs
- Triatek LP-2800 Series – each panel has up to 16 inputs and 8 outputs
- Triatek LP-3500 Series – each panel has up to 120 inputs and 60 outputs
- Triatek LP-Kit (all versions) – each panel has up to 120 inputs and 60 outputs

Notes

An RS232 to RS485 converter is required to communicate with the system if the PC only has RS232 COM ports.
Writing to the system often involves accessing the lighting controller's memory. A small delay (approx 4 seconds) will occur immediately after a write, before values can be read again.
The Triatek system does not report alarms to ObServer. If alarms are needed then an AlarmGen device will be required.
The Triatek system does not provide logging facilities to ObServer. If logging of values is needed then DataManager will be required.

Engineering

Step 1 – Install OSM

The Triatek OSM is installed automatically with all ObSys editions. Refer to the 'ObSys CD sleeve' for details on how to install ObSys.

Step 2 – Configure Triatek System

The Triatek system does not require configuration.

Step 3 – Connect COM Port to Triatek System

Using cable, connect the Triatek system to a COM port of the PC, via an RS485 to RS232 converter. Refer to the section 'Cable' below for details of the cable.

Step 4 – Plug in Triatek OSM to ObServer

Use object engineering software to locate the ObServer Setup object. Assign the Triatek OSM to an available channel. Refer to '*ObServer v20 Application Engineering Guide*'.

Note: After inserting the OSM, your engineering software may need to re-scan the ObServer object in order to view the OSM.

Step 5 – Configure Triatek OSM

The COM port, device label, alarm polling facilities, and alarm destination are configured using objects. Use object engineering software to view and modify the module objects within the OSM.
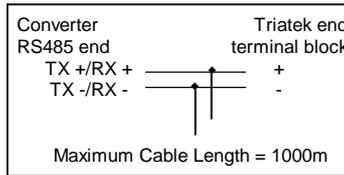
Step 6 – Access Objects within the Triatek system

Values from the Triatek system are made available as objects from ObServer. Any object software that is connected to the ObServer can access these objects.

Engineering Reference

Cable Specification

The cable between RS232 to RS485 converter and the Triatek system is as follows:

```
Converter                    Triatek end
RS485 end                  terminal block
  TX +/RX +  ─────────────        +
  TX -/RX -  ───────┐  ┌─         -
                    │  │
                    │  │

        Maximum Cable Length = 1000m
```

Objects

When the OSM is loaded the following objects are created within ObServer, use object software to access these objects.

Object[1]	Label	R/W	Type
S*c*	Triatek System connected to channel *c*	-	*[Triatek v10]*[2]
M*c*	Triatek Module connected to channel *c*	-	*[OSM v20\Triatek v10]*

Notes

[1]   The ObServer channel number, *c*, is a number in the range 1…40.

[2]   This object has a variable content and as such requires scanning.