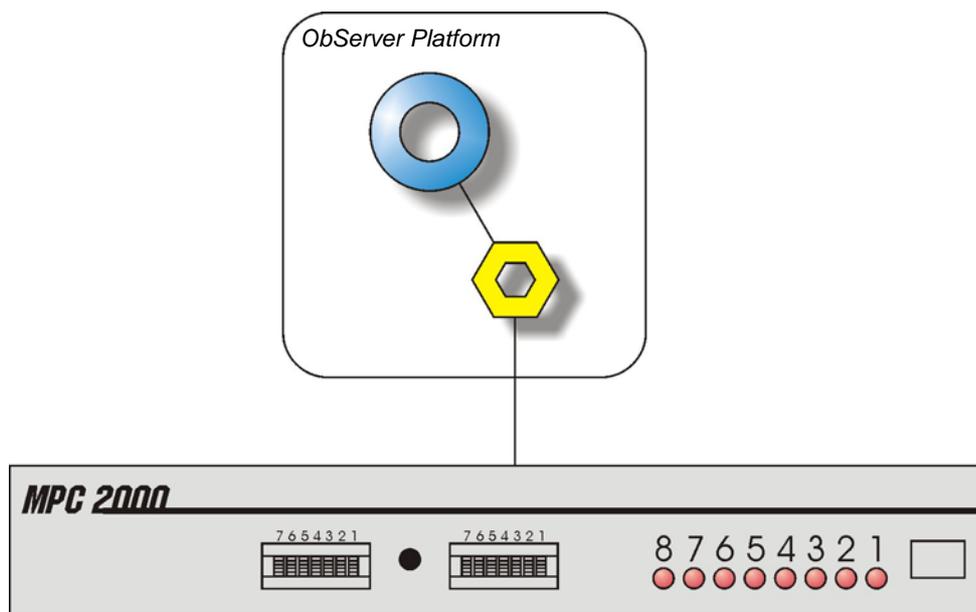# Product Engineering Guide

OSM v20 TekAir v11

Introduction

The TekAir OSM links the Tek-Air MPC-2000 Gateway using the Tek-Air Open Protocol to the ObServer. Up to 63 Tek-Trak controllers or 255 FVC-2000 fume hood controllers/IsoTek isolation room monitors can be accessed from a single MPC-2000 Gateway.

The Tek-Air open protocol allows access to values, stored in a table of variables, within the Tek-Trak controller. As the values available differ in each controller, this driver has extended decode methods that can be applied to raw data to produce useful values.

Engineering

Step 1 – Install OSM

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

Step 2 – Configure Tek-Air MPC-2000 Gateway

The MPC-2000 should be set up to communicate with Compass at 9600 baud, No parity, 8 databits. Refer to MPC-2000 Gateway documentation for port number supporting the Open Protocol.

Step 3 – Connect COM Port to Tek-Air MPC-2000 Gateway

Using cable, connect the TekAir to a COM port of the PC. Refer to the section 'Cable' below for details of the cable.

Step 4 – Plug in TekAir OSM to ObServer

Use object engineering software to locate the ObServer Setup object. Assign the TekAir OSM to an available channel. Refer to '*ObServer v10 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 TekAir OSM

The COM port, device label and the value formula are configured using objects. Use object engineering software to view and modify the module objects within the OSM.
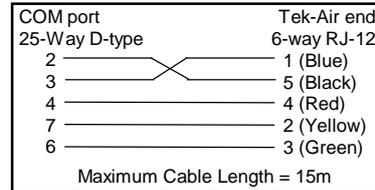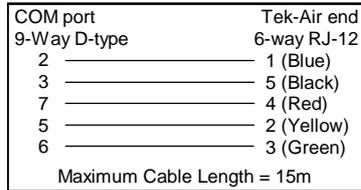
Step 6 – Access Objects within the Tek-Air MPC-2000 Gateway

Values from the Tek-Air MPC-2000 Gateway 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 COM port and the Tek-Air Gateway RJ-12 connector is as follows:

COM port 9-Way D-type	Tek-Air end 6-way RJ-12
2	1 (Blue)
3	5 (Black)
7	4 (Red)
5	2 (Yellow)
6	3 (Green)
Maximum Cable Length = 15m	

COM port 25-Way D-type	Tek-Air end 6-way RJ-12
2	1 (Blue)
3	5 (Black)
4	4 (Red)
7	2 (Yellow)
6	3 (Green)
Maximum Cable Length = 15m	

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*	TekAir System connected to channel *c*	-	*[TekAir v11]*[2]
M*c*	TekAir Module connected to channel *c*	-	*[OSM v20\ TekAir v11]*

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.