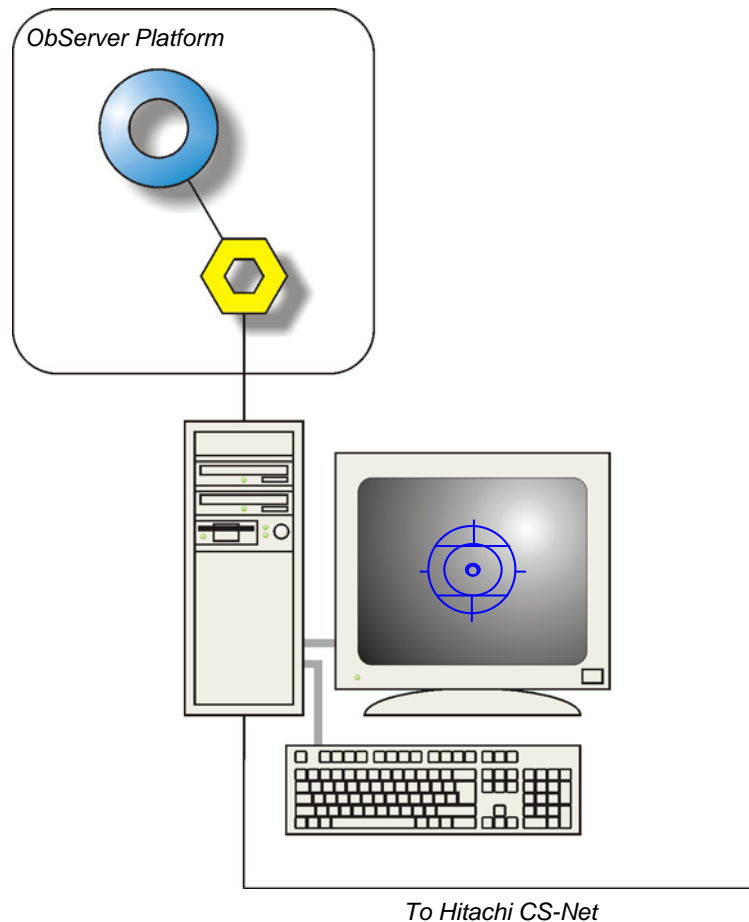


Product Engineering Guide

OSM v20 HtachiCS v12

Introduction

The HtachiCS OSM links the Hitachi CS-Net, a software package running on a standard IBM PC/AT-compatible computer, to ObServer. The Hitachi CS-Net software communicates with a network of Hitachi air conditioning units. Each indoor unit has parameters that can be read/written such as temperatures, fan speed, mode of operation. Alarm codes, temperatures, and where applicable, remote control values can be monitored.



Supported Range

- Hitachi CS-Net software v 4.0 – allows reading/writing of unit status, temperature setpoint, mode and fan speed
- Hitachi CS-Net software v 5.0 – also allows error code, suction temperature to be read
- Hitachi CS-Net software v 6.2+ – also allows local/central setting to be read/written, defrost state and remote control parameters to be read

Notes

The Hitachi system does not report alarms to ObServer. If alarms are needed then an AlarmGen device will be required. The Hitachi system does not provide logging facilities to ObServer. If logging of values is needed then a Data Manager will be required.

Engineering

Step 1 – Install OSM

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

Step 2 – Configure Hitachi System

In order to communicate with the Hitachi CS-Net software the following options should be configured within the Configuration > Service Partner section.

- Set the BMS port to the relevant COM port on the computer.
- Auto start must be enabled.
- Save the configuration file.
- Additionally, in Module Configuration all FCUs must have central control and module projected enabled.

If the CS-Net software version is later than v6.2: Suction temperature, defrost and remote control will not be available until comms has been started from the Communications menu.

Step 3 – Connect COM Port to Hitachi System

Using cable, connect the relevant COM port of the CS-Net PC to a COM port of the PC. Refer to the section 'Cable' below for details of the cable.

Step 4 – Plug in HtachiCS OSM to ObServer

Use object engineering software to locate the ObServer Setup object. Assign the HtachiCS 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 HtachiCS OSM

The COM port, and operating mode are configured using objects. Use object engineering software to view and modify the module objects within the OSM.

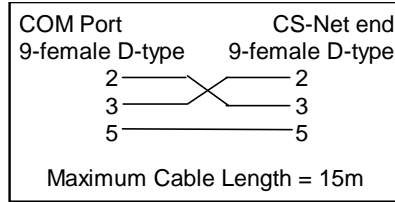
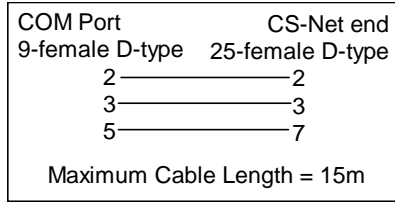
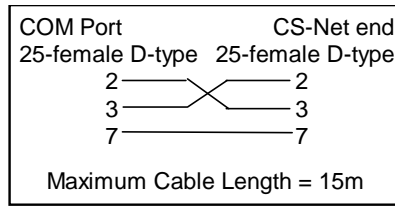
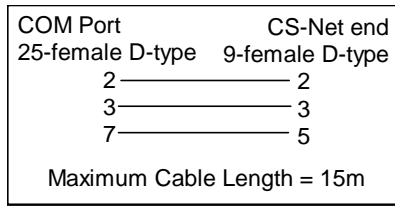
Step 6 – Access Objects within the Hitachi System

Values from the Hitachi 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 the COM port and the Hitachi system is as follows:



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
Sc	HtachiCS System connected to channel <i>c</i>	-	[HtachiCS v12] ^[2]
Mc	HtachiCS Module connected to channel <i>c</i>	-	[Osm v20\HtachiCS v12]

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.

Notes

Revision History

Version	Build Date	Details
1.0	29/1/99	Released
1.1	27/6/00	Mod: Implement CS-Net version 5 protocol.
1.1	13/3/03	Mod: Error code converted from hexadecimal.
1.1	23/4/03	Mod: Improve scanning
1.2	09/5/03	Mod: Implement CS-Net version 6.2 protocol.