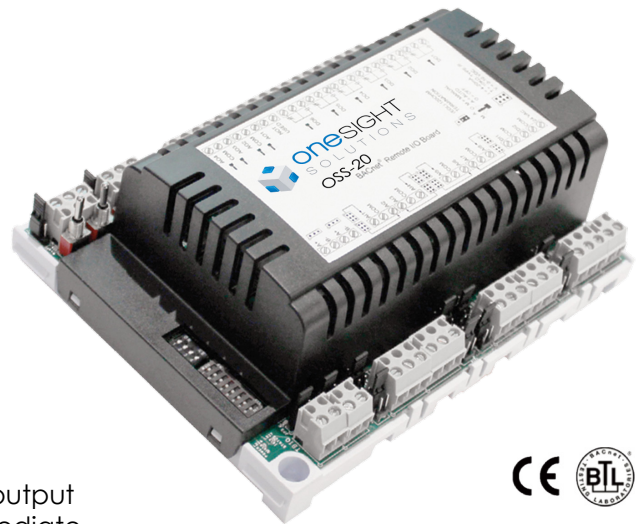# OSS-20
Remote I/O Communication Model

The OOS-20 extends your BACnet or ModBus network when your application requires additional inputs and outputs on a physical controller. Combining the 20 inputs and outputs of the OSS-20 with your Building Automation System provides simple expansion of a new or existing controller and reduces unnecessary costs of additional components.

Use the on-board override switches to manually force the output states during the start up or service calls that demand immediate intervention on a controlled or operated peripheral. All outputs are supervised, therefore, if the output is "forced on" by the override switch, the output status is sent via the network. On-board LEDs help track and diagnose and input or output activity during operation.

Features

Power & Communication

- 24Vac or 30Vdc supply
- BACnet ® MS/TP port
- BACnet ® MS/TP or Modbus communication port (selectable)

Inputs & Outputs

- 8 universal inputs
- 2 digital inputs
- 2 universal outputs (supervised)
- 2 analog outputs (supervised)
- 6 digital outputs (supervised)

Installation

- 10 override switches to manually control each output
- LED status indication of each input and output
- DIN rail mounting
- Removable, non-strip, raising clamp terminals

Network Communication

- BACnet® MS/TP or Modbus communication port (selectable via DIP switch)
- Select MAC address via DIP switch or via network

BACnet®

- MS/TP @ 9600, 19200, 38400 or 76800 bps
- Automatic baud rate detection
- Automatic device instance configuration
- Copy & broadcast configuration to other OSS modules

Modbus

- Modbus @ 9600, 19200, 38400 or 57600 bps
- RTU Slave, 8 bits (configurable parity and stop bits)
- Connects to any Modbus master

ONESIGHT
S O L U T I O N S

Tel: 01252 872738
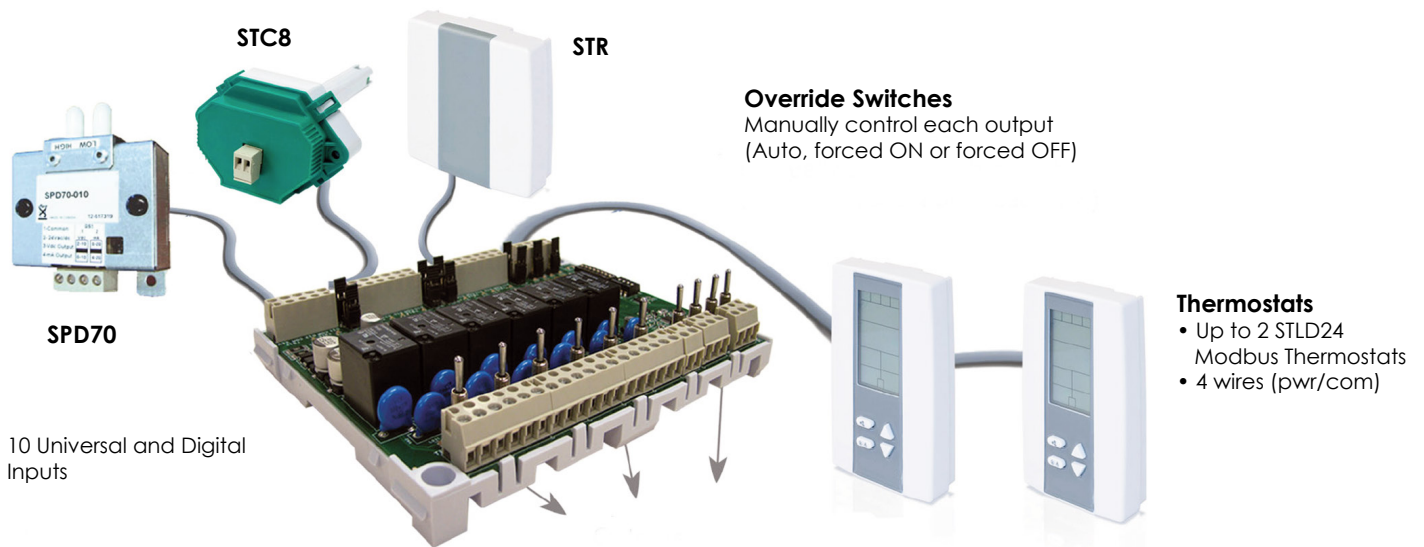**Email:** info@onesight.solutions
Web: onesight.solutions

OSS-20
Connections

Inputs
- 8 universal inputs (12-bit resolution): 0-10Vdc, 10KΩ (Thermistor type 3), on/off (dry conract), 4-20mA
- 2 digital inputs: NO/NC or direct/reverse

STC8

STR

Override Switches
Manually control each output
(Auto, forced ON or forced OFF)

SPD70

Thermostats
- Up to 2 STLD24 Modbus Thermostats
- 4 wires (pwr/com)

10 Universal and Digital Inputs

Network
- BACnet® MS/TP or Modbus communication port (selectable via DIP switch)
- Select MAC address via DIP switch or via network
- BACnet® MS/TP @ 9600,19200, 38400 or 76800 bps (BAS-C)
- Modbus RTU slave @ 9600, 19200, 38400 57600. Selectable parity and stop bit configuration:
  - No parity, 2 stop bit
  - even parity, 1 stop bit
  - odd parity, 1 stop bit

Outputs
- 2 universal outputs (12-bit resolution): 0-10Vdc, pulsed signal (20mA drive), on/off, 4-20mA
- 2 analog outputs (12-bit resolution): 0-10Vdc
- 6 digital relay outputs (5A resistive): NO/NC with independent common per relay

Accessories

Model	Temperature Sensor	Humidity Sensor	Duct Mount	Wall Mount	Pressure
STR1-11	10kΩ			✓	
STC8-11	10kΩ		✓		
SHR10	✓	✓		✓	
SHC80	✓	✓	✓		
SPD70					✓

STR1 & STC8   SHR10   SHC80   SPD70

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