

# orbit<sup>3</sup>

## MODIM MODBUS INTERFACE MODULE A PLC Interface Module for Orbit<sup>®</sup>3

### Description

Solartron Metrology, the world leader in measurement innovation, introduces a MODBUS Interface Module (MODIM) which provides an easy to use gateway between MODBUS PLCs and Solartron Metrology's Orbit<sup>®</sup>3 Digital Measurement System which is a flexible and highly accurate measuring system. The Orbit<sup>®</sup>3 system can also interface to any sensor with an analogue output as well as the myriad of linear measurement sensors manufactured by Solartron Metrology. This means that the system can be used for temperature, pressure, force, rotary measurement and linear displacement, providing all these process variables to a PLC through one simple MODBUS communications interface.

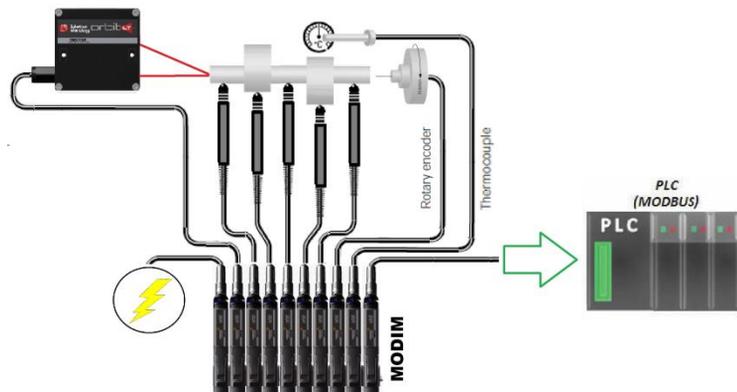
### Features

MODBUS RTU up to 115200 baud

Access complex sensor networks with varying interfaces through a set of MODBUS parameters in a single device

Connects to all Solartron Gauging Probes, Displacement, Orbit<sup>®</sup> LT, and Orbit<sup>®</sup> LTH.

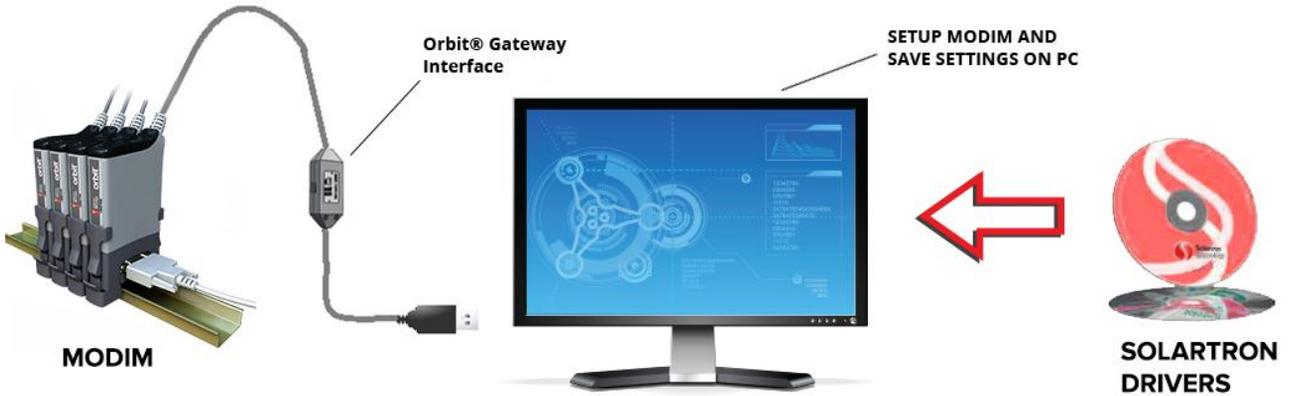
Simple network set up via a PC application.



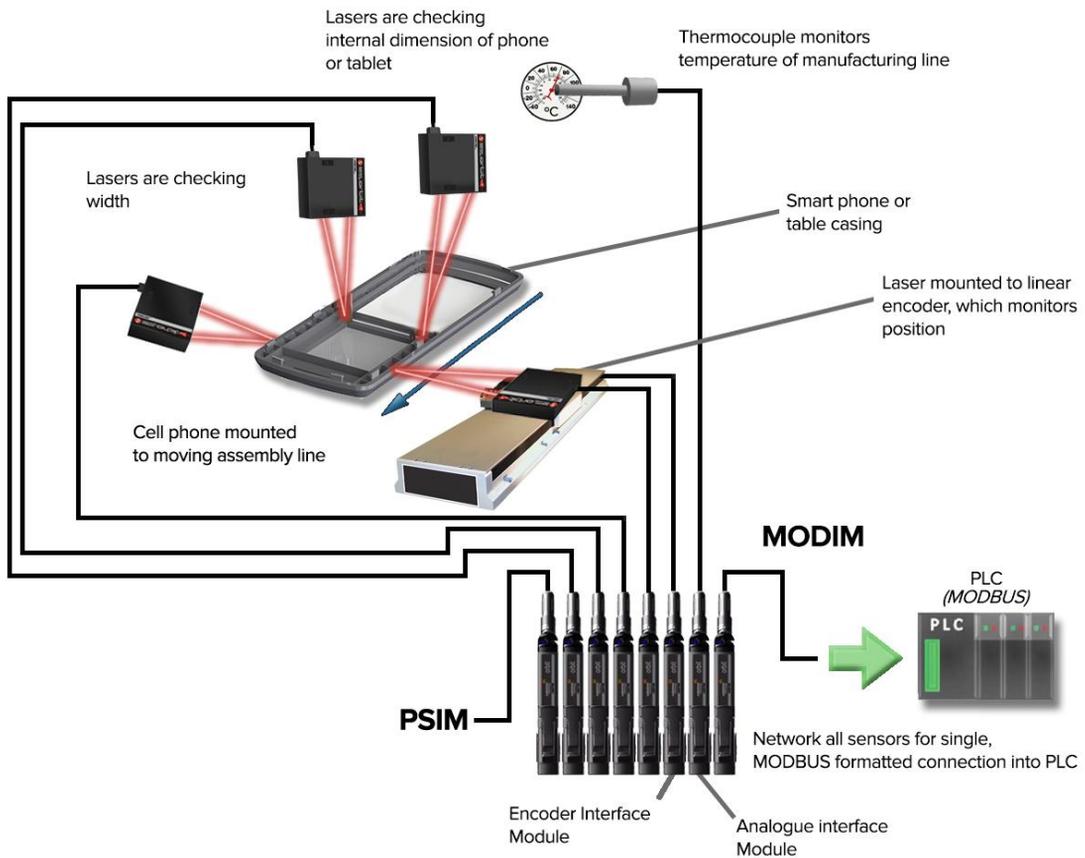
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## MODIM Setup



## Sample Application



<b>MODIM Electronics Interface</b>	
Network Protocol	MODBUS RTU SLAVE
Hardware Serial Interface	RS485
Data Transfer	Individual Readings of Network Module Data Synchronised readings of Network Module data
Baud Rates	Up to 115,200
Maximum Network Size (Note 1)	Up to 150 modules
<b>ORBIT Network</b>	
Orbit Modules	Linear Displacement Sensors range 0.25mm to 300mm. Analogue Input Modules 0-10V, 4-20mA. Rotary Encoder Modules and Non Contact Laser Modules
Orbit Measurement (Note 3)	Standard Mode
<b>Environmental</b>	
Sealing	IP43
Storage Temperature (°C)	-20 to +70
Operating Temperature (°C)	5 to 60
EMC Emissions	EN61000-6-3 and EN61326
EMC Immunity	EN61000-6-2 and EN61326
Power (Note 2)	5±0.25 VDC @ 0.06A typical
<b>Material</b>	
Body	ABS and Nylon
Note1 : The Network size refers to the Orbit Network to which the MODIM provides a gateway	
Note2: The power is for the MODIM only, the Orbit Network will require additional power depending on the modules that make up the network (Typically each Orbit module will require 60mA @ 5V DC nominal) Refer to User Manual for Details	
Note3: The Orbit Network can be set to operate in various measurement modes however the MODIM only allows configuration of Orbit Standard mode to facilitate the two MODIM Data Transfer methods	

For 3D drawings, please contact [sales.solartronmetrology@ametek.co.uk](mailto:sales.solartronmetrology@ametek.co.uk)

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Solartron pursues a policy of continuous development. Specifications in this document may therefore be changed without notice.

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