

# TRB255 OPC UA Server

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The information in this page is updated in accordance with firmware version [TRB2\\_R\\_00.07.07.1](#).

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## Summary

OPC Unified Architecture (**OPC UA**) is a cross-platform, open-source, IEC62541 standard for data exchange from sensors to cloud applications developed by the OPC Foundation. The *UA* in OPC UA stands for “Unified Architecture” and refers to the latest specification of the standard. It differs from its predecessor in that it is platform-independent, moving away from COM/DCOM to purely binary TCP/IP or alternatively SOAP.

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This manual page provides an overview of the OPC UA Server in TRB255 devices.

**Note:** OPC UA Server is additional software that can be installed from the **System** → [Package Manager](#) page.

## OPC UA Server Configuration

The **OPC UA Server Configuration** section is used to enable the local OPC UA server.



Field	Value	Description
Enable	off   on; default: <b>off</b>	Enables OPC UA server.
Port	integer [1..65535]; default: <b>none</b>	Service port.

## OPC UA Server variables

All **RUTOS** device variables are described in the table below:

**Note:** All the variables have these qualities in common:

- Namespace index is 1
- Node ID type is string
- Read-only
- Updated upon request

	ID	Type	Description
sys_uptime		UINT32	System uptime in seconds.
sys_serial		String	Device serial number.
sys_devname		String	Device name.
sys_devcode		String	Device code.
sys_version		String	Firmware version.
sys_hostname		String	Hostname.
lan_mac		String	LAN MAC address.
lan_ip		String	IP address of LAN interface.
lan_mask		String	Subnet mask of LAN interface.
lan_gateway		String	Gateway IP address of LAN interface.
lan_dns		Array of String	IP addresses of LAN interface DNS servers.
wan_ip		Array of String	IP address of WAN interface.
io_dio_dir		Array of BOOL	Directions of digital input/output pins. 0=IN, 1=OUT.
io_dio		Array of BOOL	Values of digital input/output pins.
io_adc		Array of FLOAT	Values of Analog-to-Digital converters.
gps_fix_status		UINT32	Whether a GPS connection has been acquired.
gps_timestamp		UINT64	UTC timestamp.
gps_longitude		DOUBLE	Longitude.
gps_latitude		DOUBLE	Latitude.
gps_altitude		DOUBLE	Altitude.
gps_angle		DOUBLE	Angle.
gps_speed		DOUBLE	Speed.
gps_accuracy		DOUBLE	Accuracy.
gps_sat_count		UINT32	Satellite count.
mob_modem_count		UINT32	Modem count.
mob_modem_imei		Array of String	Modem IMEI.
mob_modem_serial		Array of String	Modem serial number.
mob_modem_mnf		Array of String	Modem manufacturer name.
mob_modem_model		Array of String	Modem model name.
mob_modem_fw		Array of String	Modem firmware version string.
mob_modem_temp		Array of FLOAT	Modem temperature.
mob_sim_count		Array of UINT32	SIM count.
mob_sim		Array of UINT32	Selected SIM.
mob_sim_state		Array of String	SIM state.

mob_sim_iccid	Array of String	SIM ICCID.
mob_rssi	Array of INT32	RSSI.
mob_conn_type	Array of String	Data carrier type.
mob_conn_state	Array of String	Connection state.
mob_net_state	Array of String	Network link state.
mob_operator	Array of String	Operator name.