Minebea intec
The true measure

Software miOPC

OPC UA server for simple scale integration

Benefits

- Simple integration of existing scales via Ethernet TCP/IP or serial interface
- Standard scale profile in line with OPC Foundation
- Data security ensured through encryption
- Simple intuitive operation

OPC UA (Open Platform Communications Unified Architecture) is a standard for communication in the industrial automation space. The server enables operating system-independent data exchange between scales and overarching systems such as ERP or MES. It is suitable for use with the industrial scales Combics, Signum and Midrics and all IS platforms.

Easy integration in line with latest production standard for state-of-the-art production:

- The miOPC software installs the **OPC UA server** as a **service**, meaning scales can be integrated into the existing IT infrastructure.
- Exceptional **data security** standards are maintained between server and client thanks to latest data encryption algorithms.
- The OPC UA server complies fully with the **OPC UA Companion Specification for Weighing Technology**.
- The server is managed through a **web application** with an intuitive user interface.

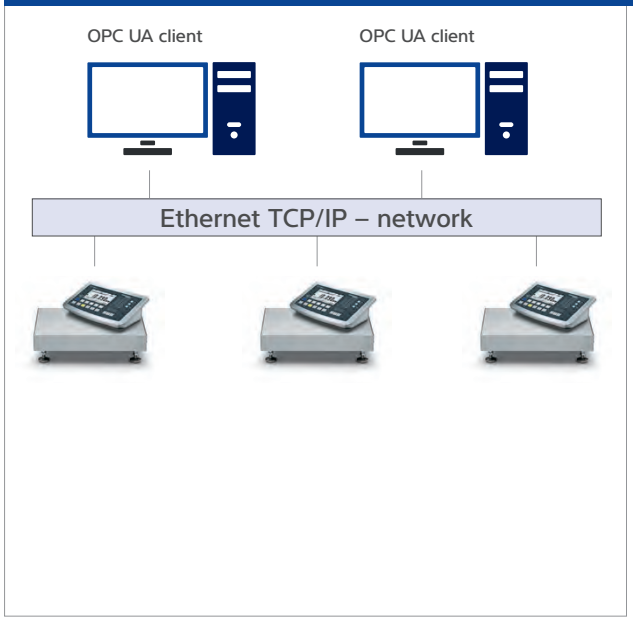
The right solution for all of these applications:

Weighing | Filling and dosing | Formulation | Counting

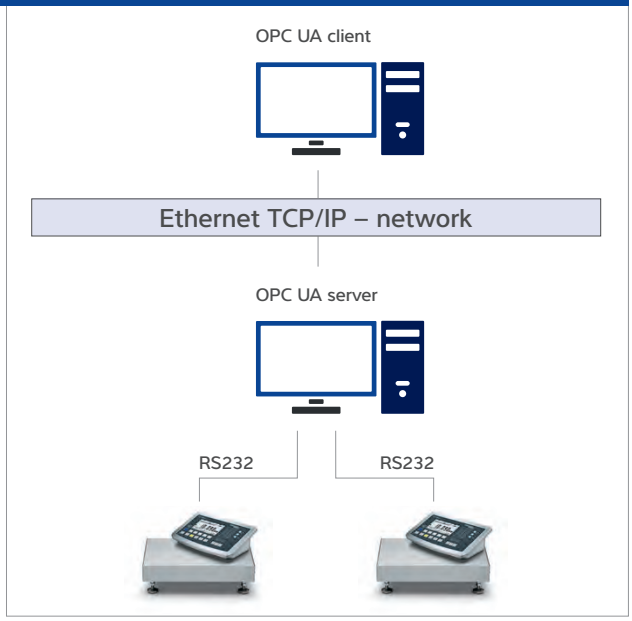
Technical specifications

- Scales are integrated in line with the ´OPC UA Companion Specification for Weighing Technology´, issued in 2020, which defines the data interfaces within the OPC UA. The specification was developed as part of a joint project between the VDMA (German Mechanical Engineering Industry Association) and several manufacturers of weighing technology. It is administered by the OPC Foundation. Official title: ´OPC UA Companion Specification for Weighing Technology´ – VDMA 40200: 2020-06 (Version 1.0).
- The server is installed as a service on a PC within the network. Various system architectures are supported and the server allows different configurations including across multiple locations.
- Scales are connected using a serial RS232 or Ethernet TCP/IP interface. The scales use an internal protocol (xBPI), which is interpreted by the server. This means scales already installed at the customer site can be connected to the OPC UA server retrospectively.

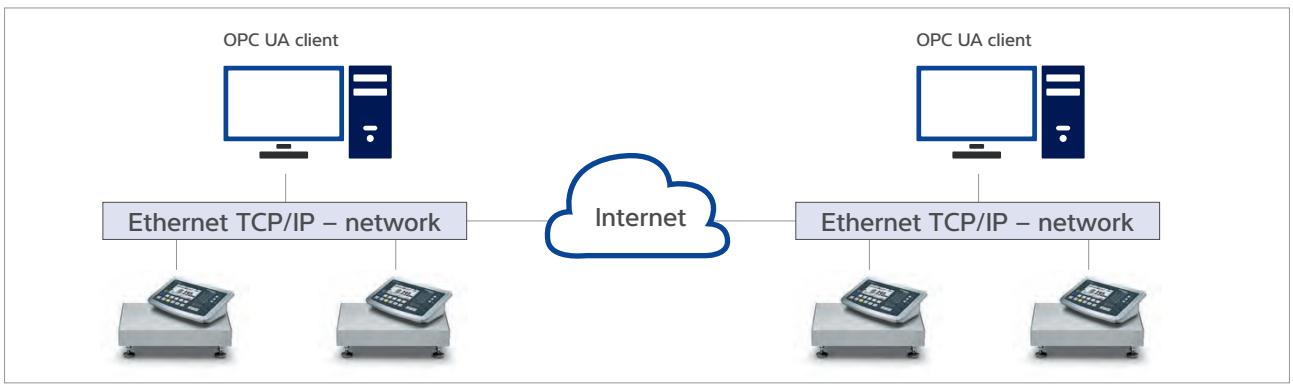
Application examples



Ethernet TCP/IP



Serial RS232



Different locations connected via the internet

miOPC software – available functions for ‘Simple Scale’

	Value	Name as specified in companion specification	Description
Current weight value	Gross weight value	CurrentWeight. Gross	Current gross weight value with decimal places
	Net weight value	CurrentWeight. Net	Current net weight value with decimal places
	Tare value	CurrentWeight. Tare	Current tare value
	Status: ‘Zero’	CurrentWeight. CenterofZero	Weight value is within 1/4 d of zero range
	Status: ‘Single range or multi-range scale’	CurrentWeight. CurrentRangeId	Current range for scale Displayed as 0–3: single range or multi-range scale
	Min/max. value	CurrentWeight. EURange	Indicates minimum and maximum value in active range
	Weight unit	CurrentWeight. EngineeringUnits	Indicates the weight units as abbreviations
	High resolution value	CurrentWeight. HighResolutionValue	Indicates the high resolution weight values: gross, net, tare
	Error status: combined	CurrentWeight. Invalid	Indicates if the scale is in ‘Overload’ or ‘Underload’
	Error status: overload	CurrentWeight. Overload	Indicates if the scale is in ‘Overload’
	Error status: underload	CurrentWeight. Underload	Indicates if the scale is in ‘Underload’
	Printable weight value	CurrentWeight. PrintableValue	CurrentWeight value as character string without unit: gross, net, tare
	Tare mode	CurrentWeight. TareMode	Indicates the tare mode for the scale: not tared, measured value or entered value
	Stability	CurrentWeight. WeightStable	Indicates if weight value was taken when scale was stable
	Smallest verification interval (d)	CurrentWeight. ActualScaleInterval	Indicates verification interval for current weighing range (d), including unit
	Smallest verifiable verification interval (e)	CurrentWeight. VerificationScaleInterval	Indicates verifiable verification interval for current weighing range (e)
Scale identification	Scale type	DeviceClass	Indicates the type of device; default is ‘Scale’
	Manufacturer	Manufacturer	Indicates the device manufacturer
	Model	Model	Indicates the model, e.g. CAIS-L3
	Serial number	SerialNumber	Indicates the device’s serial number
	Software update	SoftwareRevision	Indicates the software version installed for the device
	Available weighing ranges	Range 0 Range 1 Range 2 Range 3	Indicates weighing ranges for the scale: (RangeID), verification intervals d and e, incl. min. and max. values
Actions	Zeroing	SetZero	Activates zero function
	Taring	SetTare	Activates tare function

Compatible operating systems

OS version	Architectures
Windows 7 Client, SP1+, 8.1	x64, x86
Windows 10 Client, Version 1607+	x64, x86
Windows Server 2012 R2+	x64, x86

Compatible scales

- Industrial scales Combics, Signum and Midrics, and IS platforms
- ‘xBPI’ compatible scales
- Other scales on request

Look for this symbol on Minebea Intec products:

OPC UA upgradable

Ordering information

Software miOPC

Description	Order number
Software miOPC – OPC UA server licence for 1–5 scales	62OPC UA-01
Software miOPC – OPC UA server licence for 6–10 scales	62OPC UA-06
Software miOPC – OPC UA server licence for 11 or more scales	62OPC UA-11

The products and solutions presented in this data sheet make major contributions in the following sectors:

The technical data given serves as a product description only and should not be understood as guaranteed properties in the legal sense.

Specifications subject to change without notice.

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