

# Controller requirements: Productivity+™ Scanning Suite

## Okuma OSP-P300MA and OSP-P300SA

The information within this document provides the minimum recommended controller requirements to enable the use of a SPRINT™ system with Productivity+™ on a machining centre with an Okuma OSP-P300MA or OSP-P300SA controller.

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**NOTE:** Part numbers and descriptions within this document relating to items provided by organisations other than Renishaw are provided for information only. Whilst every effort has been made to ensure these are accurate, please contact the machine tool or controller OEM or distributor for confirmation before purchasing.

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## CNC plug-in installations

Controller option
SPRINT terminal
THINC-API
OSP-REMOTE

- <sup>1</sup> The above options should be sufficient to make the machine and controller 'SPRINT ready' and should also include multi-axis commands such as G467 and G469. Note however that it is the user's responsibility to verify the exact options required with the local Okuma distributor as requirements may differ from machine to machine.
- <sup>2</sup> Subject to controller configuration, use of a mouse and keyboard will help to simplify installation, programming, data entry and navigation through the Productivity+ CNC plug-in application.

In addition to the Productivity+ CNC plug-in, a series of optional toolkits are available providing enhanced functionality.

Typically, run-time elements of the Productivity+ Scanning Suite are installed on an external data processor. Use of a Renishaw DPU-2 (Renishaw part no. A-4007-4230) is recommended.

The minimum recommended specification for any alternative external data processor (PC) is:

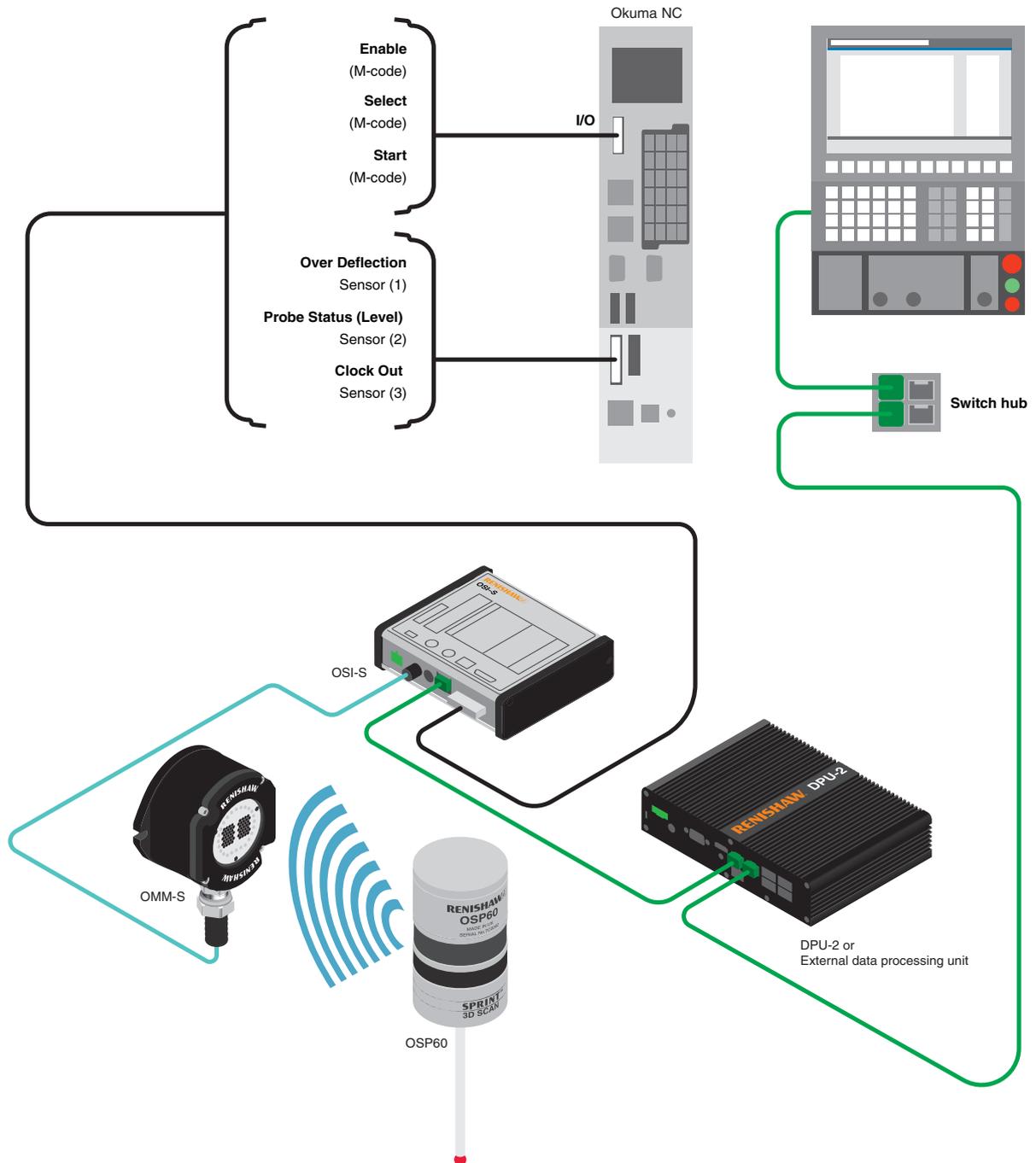
- Microsoft® Windows® 10 (Enterprise or Professional)
- Intel Core i3-5010U
- 2.1 GHz, 2 cores, 4 threads
- 4 GB RAM
- 64 GB solid state drive
- Two 100/1000Base-T Ethernet connections (dedicated to Productivity+). If a customer specific network connection is required, an additional Ethernet connection is required

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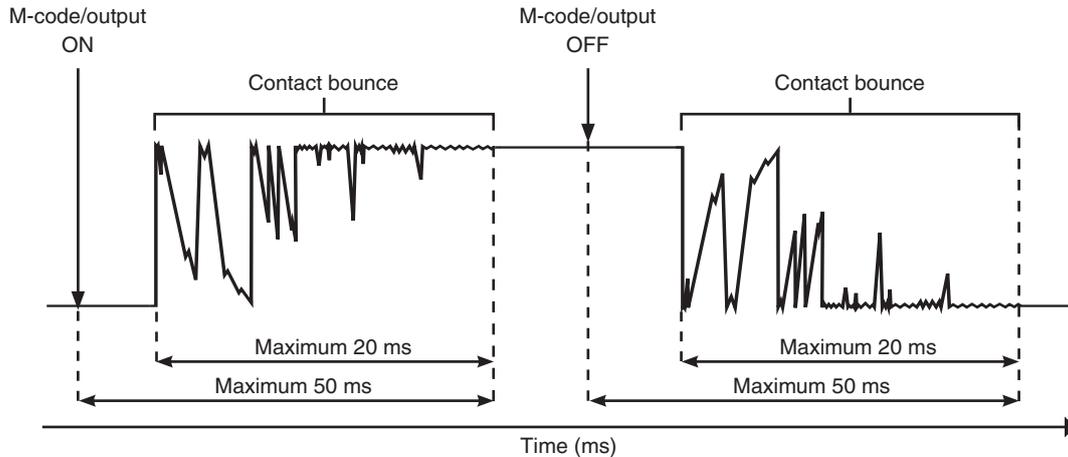
**NOTE:** It is possible to install onto an external data processor with a lower specification, however this is the minimum recommended specification based on the data processing requirements of Productivity+ software applications.

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## Connection schematic



## Output signal requirements



Any increase in these values will impact negatively on cycle times and may prevent the system working reliably.

The 3 × pairs of latched M-codes (high-speed digital outputs) should be reset when Reset is pressed on the CNC machine tool.

The output/input signal level change must be from 0 V to between 5 V and 30 V.

Use of solid-state relays is recommended as issues can arise from noise on mechanical relay contacts (contact debounce time of 20 ms maximum).

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