

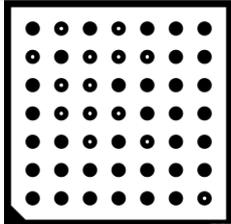
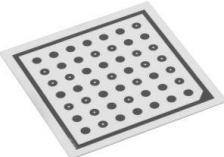
## Discontinuation of Ensenso 7x7 dot pattern calibration plates

<b>Affected Products:</b>	Ensenso calibration plates with 7x7 dot pattern (see listing below)
<b>Type of Product Change:</b>	<input checked="" type="checkbox"/> Discontinued Product or Part
<b>Document Version:</b>	1.1 public release
<b>Document release date:</b>	2020-06-04
<b>Proposed date of change:</b>	2020-06-01

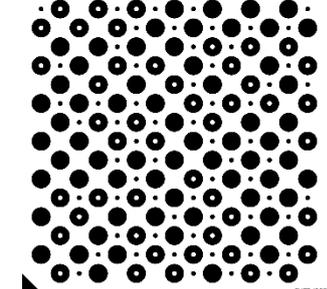
## Overview and scope

The accessory Ensenso calibration plates with 7x7 dot patterns are discontinued and replaced by the newer plates with 15x15 dot calibration plates which have been already available. The 15x15 dot patterns do not have to be observed completely and thus fewer plate dimensions are offered.

## Discontinued Ensenso calibration plate articles

7x7 dot pattern example	Calibration plate example picture	Items	Calibration plate sizes	Material
		AL00018	160mm	Ceramic
		AL00019	100mm	Ceramic
		AL00020	70mm	Ceramic
		AL00021	50mm	Ceramic
		AL00051	300mm	Aluminum composite

## Current Ensenso calibration plate articles

15x15 dot pattern example (112 regular dots)	Calibration plate example picture	Items	Calibration plate sizes	Material
		AL00064	100mm	Ceramic
		AL00065	200mm	Aluminum composite
		AL00091	390mm	Aluminum composite

## Description of the product adaption

### Hardware

The calibration plate materials remain either screen printed ceramic substrates with nominal thickness of 1mm or aluminum composite material of 3mm thickness. Due to its increased size compared to the old plates, the large 15x15 dot calibration plate (390mm) is better suited for large view fields.

Details regarding the plate print specifications are included in the Ensenso manual under “Hardware Specification” > “Calibration Plates”; current online manual link:

[https://www.ensenso.com/manual/2.3/calibration\\_plates.htm](https://www.ensenso.com/manual/2.3/calibration_plates.htm)

### Software compatibility

The Ensenso 15x15 dot patterns are supported since the initial release of EnsensoSDK 2.2 and in all later versions. E.g., they provide the benefit that pattern detection and localization also works without observing the complete pattern area. Details regarding the calibration pattern usage are included in the Ensenso manual under “HowTos” > “Calibration” > “Calibration Patterns”; current online manual link:

[https://www.ensenso.com/manual/2.3/howto\\_calibrationpatterns.htm](https://www.ensenso.com/manual/2.3/howto_calibrationpatterns.htm)

Please note that although the 7x7 dot calibration plates will not be produced any more, the EnsensoSDK will continue to support the 7x7 dot pattern as before. This means that the NxCalTab tool and the NxLib command “GenerateCalibrationPattern” can generate such patterns as before. This also means that custom-made plates or targets using the 7x7 dot pattern will continue to function as calibration devices.

Forthcoming EnsensoSDK versions may include improvements in calibration pattern detection and localization that are optimized for the current 15x15 dot patterns.

### Special note on calibration quality checking:

With EnsensoSDK 2.3.1536 the “TriangulationError” has been introduced as a more stable and accurate measurement of calibration quality compared to the previously shown “PoseError” values. In particular, the “TriangulationError” behaves more consistently for the 7x7 dot patterns and the 15x15 dot patterns, e.g., when checking an Ensenso calibration. Thus it is now used by default in the calibration wizard.

## Recommended actions for customers

No further regulatory actions are required by customers unless the product is certified, e.g., in a medical application. If this should be the case, please contact IDS sales for an evaluation sample.