







PRODUCT & SOLUTION OVERVIEW · 2026

Technical Brief

Log-to-board scanning, grading and optimization

4	2	3	±1 mm
Scanner families	Software platforms	Solution areas	Measurement accuracy

OEM Vision develops AI-powered 3D scanning, measurement and optimization technology for the timber industry. This brief summarizes **four scanner families and two software platforms** covering every stage of the sawmill, from the logyard to secondary breakdown. All systems work together on a shared data backbone.

SOLUTION MAP

One flow from log to board

01 Logyard
- TUNA LogScan
- WoodScan
- Optisoft

→

02 Primary Breakdown
- TUNA LogScan
- ALTAY LogScan
- Optisoft

→

03 Secondary Breakdown
- ARAS-L BoardScan
- ARAS-T BoardScan
- WoodScan
- Optisoft

SCANNERS

Four scanner families



LOGYARD · LINEAR MULTI-SENSOR SCANNING

TUNA LogScan
Geometry and internal quality

Combines 3D laser, colour imaging and optional X-ray to assess overbark/underbark geometry and internal quality, supplying data for value-based sorting and cutting optimization.

180 m/min · Diameter 1200 mm · X-ray 650 mm · ±1 mm · Tuna-SM1200 / SM1200X · Ethernet · OPC-UA · REST



PRIMARY BREAKDOWN · 360° IN-POSITION SCANNING

ALTAY LogScan

Before the first cut

Scans the log 360° on the carriage, headrig, end dogger or infeed; calculates the optimal cutting pattern and drives PLC setworks directly.

360° · Diameter 650 mm · 1 s/m · < 200 ms · 10,000+ patterns · PROFINET



SECONDARY BREAKDOWN · LONGITUDINAL FLOW

ARAS-L BoardScan

Grading at line speed

Scans boards lengthwise on all four faces in a single pass; laser, colour and tracheid scatter assess surface defects, grain deviation and hidden knots.

120 m/min · 4 faces · 200 × 600 mm · Aras-L-SM60 · PROFINET · OPC-UA



SECONDARY BREAKDOWN · TRANSVERSE FLOW

ARAS-T BoardScan

Grading on the lugged chain

Scans boards crosswise on the lugged chain, all four faces in one pass, supporting trimming and sorting decisions for green, dry or planed lumber.

240 lugs/min · 4 faces · 200 × 600 mm · Aras-T-SM60 · PROFINET · OPC-UA

SOFTWARE

Two software platforms



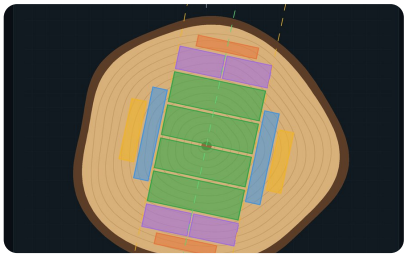
LOGYARD CONTROL

WoodScan

Sorting and control

Sorts logs automatically by geometry, quality, species or customer criteria; manages suppliers, payments, shifts and downtime and exports data to ERP. Includes WoodScan AI defect detection and WoodScan Trace log-to-board traceability.

Auto sorting · Supplier management · ERP export · Live reporting



CUTTING OPTIMIZATION

Optisoft Optimizer

From log insight to optimal cut

Calculates the highest-value cutting pattern in real time from log geometry, quality, product prices and machine constraints; modular sorting, grading and cutting optimization.

15%+ yield · < 200 ms · 10,000+ patterns · Modular

COMPARISON

Scanners at a glance

	TUNA	ALTAY	ARAS-L	ARAS-T
Stage	Logyard	Primary	Secondary	Secondary
Material	Log	Log	Board	Board
Speed / capacity	180 m/min	1 s/m	120 m/min	240 lugs/min
Max. size	Ø 1200 mm	Ø 650 mm	200 × 600 mm	200 × 600 mm
Sensors	Laser · Colour · X-ray*	360° laser	Laser · Colour · Tracheid	Laser · Colour · Tracheid
Interface	Ethernet · OPC-UA · REST	PROFINET · OPC-UA	PROFINET · OPC-UA	PROFINET · OPC-UA

* X-ray module optional (Tuna-SM1200X), up to 650 mm log diameter.

SHARED BACKBONE

Traceability and integration

WoodScan Trace	Links every board to its source log and its position within the log for yield analysis, quality claims and chain-of-custody reporting
WoodScan AI	Defect detection and real-time grading across all scanners
Protocols	PROFINET · Ethernet · OPC-UA · REST API
Enterprise systems	WoodERP and third-party ERP systems

Let’s design the right solution for your mill

Contact our team for a site survey, layout proposal or a live demo.

Request a Demo

oemvision.com.tr
info@oemvision.com.tr
+90 (212) 577 25 67
+90 (544) 636 12 00
Başakşehir, Istanbul · Türkiye

Specifications are subject to change without notice. Actual performance depends on line configuration, material dimensions and operating conditions. Images are for illustration.