

Conveyor Volume Scanner

Optimize
conveyor
productivity
and gain
ultimate
production
control

- 🕒 Real-time volume measurement
- 👁️ Eye-safe LiDAR laser
- 📊 Greater than 98.5% typical accuracy
- 🏗️ Mounting frames for belts 400mm-2000mm standard frames (3000mm with custom mounting)
- 📏 Proximity sensor for reliable speed measurement
- 📶 Built-in WiFi 2.4 or 5 GHz
- 👤 User-friendly operator interface
- 🌐 WiFi and network remote control
- 🔌 Onboard HTTP RESTful API for direct data access

LOADSCAN[®]

LOADSCAN.COM //





Belt scanners are beneficial wherever conveyor belts are used

Easy batching of landscape products

- Simply program your CVS to batch specialty mixes
- Set up daily/weekly jobs from your company dispatch software and feed to the CVS via its onboard API
- Provide your loader operator with visibility of the job list via your own in cab tablet or smartphone
- Monitor and manage jobs from the back office via reports tab
- Better manage your equipment and control your output
- Automatically stop the belt when batch volume reached

Non-contact measurement of aggregates

- Accurate volume measurement of quarried materials
- Optimize yield of stone, sand or gravel product streams
- Manage extraction rates and inventory stockpiles
- Guarantee graded aggregate quantities according to customer specification

Control mined materials

- Use the built-in HTTP RESTful API to communicate with external control systems
- Accurately report on quantity of end product carted to shipping points
- Fix your CVS to any existing conveyor belt to gain volume flow insights and improve productivity rates

Easy WiFi connection for control and reporting via your smart phone, tablet or other connected device

Built tough to last

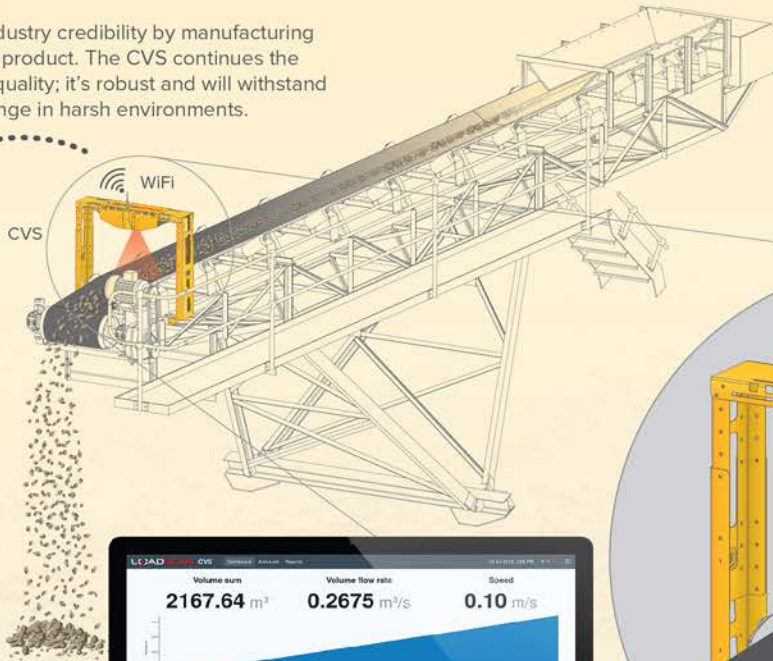
Loadscan has earned industry credibility by manufacturing an innovative superior product. The CVS continues the tradition of high build quality; it's robust and will withstand a wide temperature range in harsh environments.

The right fit for your belt

With the correct size frame, the CVS can run on any belt from 400mm to 2000mm (16–79 inches) wide (we can even custom mount it for larger belts up to 3000mm (118 inches) wide). And, yes, our belt scanner can be used on deep belts to measure even greater quantity of product.

Job: #00001243	
Volume sum	2167.64 (m³)
Volume flow rate	0.2675 (m³/s)
Belt speed	0.10 (m/s)
Material Name	Scoria (Sap 7)
Customer Name	Maveric Earth Movers
Target volume	2500.00m³

Production Tracking Data



Web-based user interface with built-in reporting

Hassle-free reporting

Unlike other optical belt scales, which provide some data but don't integrate easily, the Loadscan CVS has been designed to provide you with hassle-free, insightful reporting.

Easy, cost-effective self-installation

Simply follow the step-by-step instructions provided with your CVS unit and get it up and running in no time. Once installed, your conveyor scanner will require little, if any, maintenance so you can get on with honing your productivity.

Highly accurate, latest laser technology

Loadscan's specially designed scan-head, with single laser, continuously scans the full width of the belt at high angular resolution so that you can be sure of exactly what's flowing by.

Scanner options

Your product reference describes the model and frame size of your Conveyor Volume Scanner.

CVS-1S Standard model

3 frame sizes
CVS-1SS: Small, 500-1150mm
CVS-1SM: Medium, 1150-1750mm
CVS-1SL: Large, 1550-2200mm

CVS-1W Wide temperature range

Extremely robust version to withstand -40°C to 60°C
Available in 3 frame sizes

Custom mount

Fits large belts up to 3000mm wide



Technical specifications:

Belt width:	400 – 2000 mm (15.75 – 78.75 in)
Belt speed:	0.1 – 12 m/s (0.3 – 40 feet/s)
Accuracy:	> 98.5% typical*
Speed sensor:	Inductive speed sensor (proximity switch)
Ethernet interface (LAN):	Gigabit Ethernet (weatherproof RJ45 connector)
Wireless interface (WLAN):	2.4 or 5 GHz 802.11n/ac (configurable band, hotspot or client mode)
Supported communication protocols:	HTTP RESTful API
Switching inputs:	
– Number of inputs:	1
– Input voltage range:	3 – 32 VDC
– Maximum input current:	18 mA
– Isolation voltage:	4000 Vrms
Switching outputs (configurable status signals):	
– Number of outputs:	3
– Load voltage range:	3 – 32 VDC
– Load current range:	0.02 – 2.5A
– Isolation voltage:	4000 Vrms

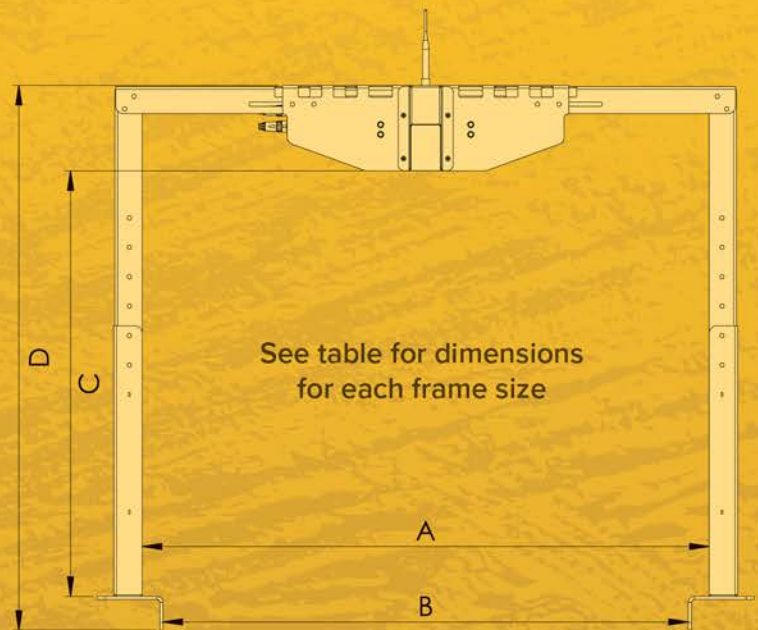
Power:	
– Voltage:	9 – 36 VDC (90 – 305 VAC with external power supply option)
– Current:	3A max. @ 24 VDC heater off, 6A max. @ 24 VDC heater on (at start-up below 5°C (40°F))
Laser scanner:	Class 1 (eye-safe)
– Field of view:	90°
– Angular resolution:	0.667°
– Scan rate:	100 Hz
Operating temperature:	CVS-1S: -30° – 50°C (-22° to 122°F) and CVS-1W: -40° – 60°C (-40° to 140°F)
Weight:	Determined by model

**Unadjusted surface volume measurement. Does not account for variations in product density affecting corrected volume or mass computations.*

Small frame	Dimension	Millimeters		Inches	
		min	max	min	max
	A	710mm	1160mm	27.95in	45.67in
B	510mm	1150mm	20.08in	45.28in	
C	555mm	1080mm	21.85in	42.52in	
D	858mm	1383mm	33.78in	54.45in	

Medium frame	Dimension	Millimeters		Inches	
		min	max	min	max
	A	1320mm	1770mm	51.97in	69.69in
B	1120mm	1760mm	44.09in	69.29in	
C	785mm	1310mm	30.91in	51.57in	
D	1089mm	1614mm	42.87in	63.54in	

Large frame	Dimension	Millimeters		Inches	
		min	max	min	max
	A	1760mm	2210mm	69.29in	87.01in
B	1560mm	2200mm	61.42in	86.61in	
C	1085mm	1610mm	42.72in	63.39in	
D	1388mm	1913mm	54.65in	75.31in	



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