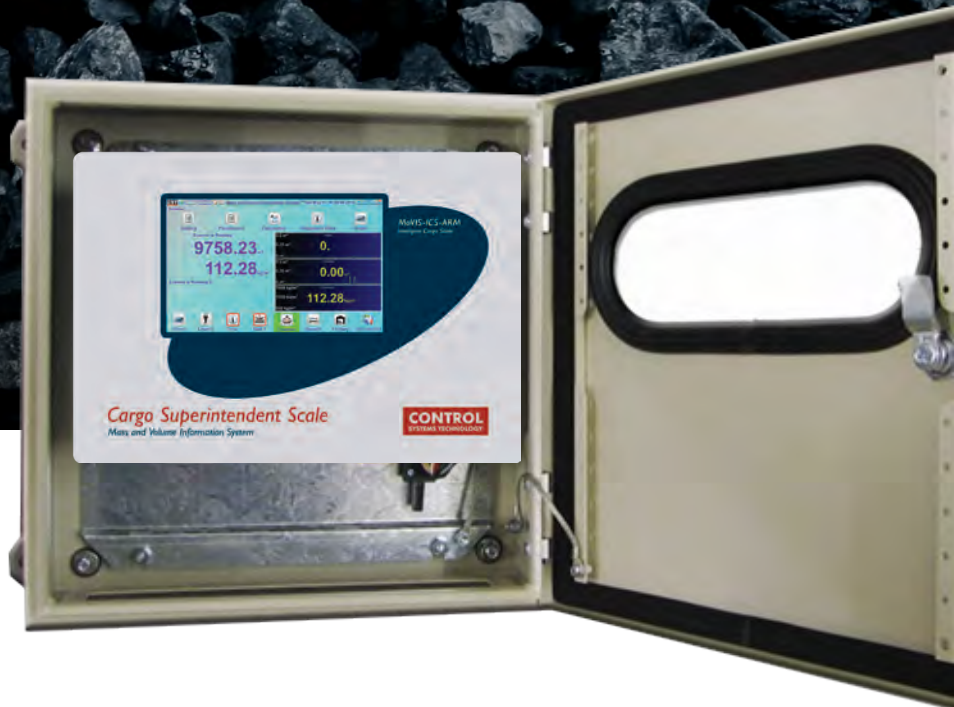


CONTROL
SYSTEMS TECHNOLOGY



MODEL MaVIS-ICS-ARM

The Intelligent Cargo Scale is one of the most advanced multifunctional weighing electronics in the world. It has the following capabilities and configurations.

- + 1 or 2 belt weighers or
- + 1 or 2 bins scales, or
- + 1 Belt weigher and 1 bin scale

plus

- + 1 or 2 flow controllers
- + High reliability dual in-line belt weigher
- + Loss in weight systems
- + Trade Certified Applications
- + Integrated Laser Scanner for Bulk Density Measurement
- + Communications protocols

Cargo Superintendent Scale

MODEL MaVIS-ICS-ARM

**SOPHISTICATED VERSATILE
BELTWEIGHER ELECTRONICS**

Cargo Superintendent Scale

MODEL MaVIS-ICS-ARM

STANDARD FEATURES

- + Fully automated belt weigher electronics
- + Programmable auto zero tracking
- + 4 isolated analogue input/output slots (max6)
- + 5 isolated digital input/output slots (max8)
- + Standard outputs for rate, total and alarm
- + RS232/RS485 duplex serial communications (modbus compatible)
- + IP66 standard enclosure: powder coated, mild steel, viewing window, wiring direct to circuit board
- + Bin scale controller functions
- + 110/240 Vac power supply
- + Up to 1000 cable metres to Load Cell and Tachometer
- + Colour graphical touch screen user interface

OPTIONS

- + Laser scanner volume and density
- + 316 stainless steel flat or sloping roof
- + IP66 enclosures
- + 316 stainless steel DIP enclosure
- + Wiring via DIN rail mount terminals
- + Intrinsic Safety (IS) Barriers
- + DeviceNet interface or any other popular scada interface
- + Event logging/Audit trail (trade certification approved) - span, alarm, zero and data changed events logged
- + 24 Vdc power supply
- + Uninterruptible power supply
- + TCP/IP network access
- + Printer Output
- + Custom software and control functions
- + Up to 6 isolated analogue I/O
- + Up to 8 isolated digital I/O

SPECIFICATIONS

ANALOGUE INPUT/OUTPUT SITES (TOTAL 4 ON BOARD) EXTRA 2 OPTIONAL ON ADDITIONAL SEPARATE BOARD ALL BI-DIRECTIONAL

Module type	Analog Devices' 7B Series
Module Ranges	0 – 20mA, 4 – 20mA, 0 – 5Vdc, 1 – 5Vdc, RTD -100°C – +100°C
Isolation (Optical)	1500V rms

DIGITAL INPUT/OUTPUT SITES (TOTAL 5 ON BOARD) EXTRA 3 OPTIONAL ON ADDITIONAL SEPARATE BOARD

Non Dedicated Inputs or Outputs	5
Module Type	Opto 22
Module Ranges	3–60Vdc, 4–200Vdc, 24–140Vac, 24 – 280Vac
Relay Modules available	1A 0-100/0-120 Vdc/Vac or 5A 0-110/0-250 Vdc/Vac
Isolation (Optical)	4000Vrms for Opto 22, 1500Vac for Relay Modules

TACHOMETER INPUTS (TOTAL 2)

Type	Specialised on-board, 2 x Universal 2 or 3 wire NPN or PNP
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COMMUNICATIONS

Comm1 (RJ12 Port)	1 x RS232
Comm2 (RJ12 Ports)	1 x RS232, Switchable to 2 x RS485 (for daisy chain)
Speed 3	00 – 115 200bps
Anybus Industrial Networks	ASCII, ModBus RTU Mode, Ethernet, Optional TCP-IP, DeviceNet, Profibus, Profinet, CompoNet, ControlNet, USB, Bluetooth etc.

DISPLAY 800X480 COLOUR GRAPHIC TOUCH SCREEN

Optional	Remote transmission Display application run on PC or connected remotely via ethernet
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POWER SUPPLY

Standard	110/240Vac (Switchable)
Optional	24Vdc
UPS	Optional, 15min – 2 hour

OPTIONS

Laser Scanner	For Volume and Bulk Density on belt
Inclinometer	For weighers on variable incline booms
Heater	Where temperatures fall below -10° C
Sunshade	Where temperatures exceed + 50° C
Light	Fluorescent with door activated switch
Intrinsic Safety Barriers	For weighers installed in hazardous atmospheres
Printer	Dot Matrix or Thermal
*Remote Flow Rate Meter	3½/2 digit (to 1999 tph) or 4½ digit (to 19999 tph) Loop, AC or DC powered
*Remote Totaliser	8 Digit, LCD or LED display, Battery, AC or DC powered
Temperature Compensation	To compensate conveyor belt effect

* = Or Use Remote Display Application on PC or Device

ENCLOSURES (ALL WITH GLASS VIEWING PANEL)

Powder Coated Mild Steel, Flat Roof	Typical 400 x 400 x 155mm or 400 x 600 x 210mm
316 Stainless Steel, Flat Roof	Typical 380 x380 x 210mm or 380 x 600 x 210mm
316 Stainless Steel, Sloping Roof	Typical 400 x 400 x 225mm or 600 x 400 x 225mm (excluding roof)
316 Stainless Steel, DIP	Typical 500 x 400 x 200m

Environmental Protection IP66

TEMPERATURE RANGE

Standard	-10°C to +50°C
Optional heater	-40°C to +50°
Optional sunshade	-10°C to +60°C

TEMPERATURE STABILITY

15ppm/°C

MAXIMUM CABLE LENGTH

(as standard) 1 000 Metres

WEIGHT

10 – 25kg

MaVIS MASS AND VOLUME INFORMATION SYSTEM

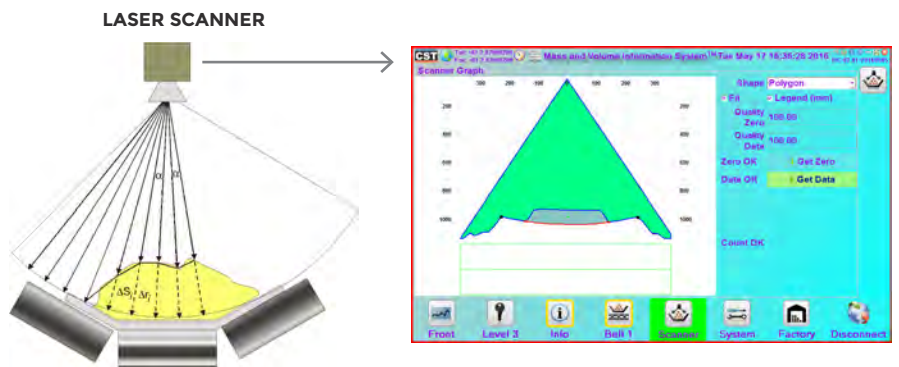
Export each ship load of cargo with confidence when using the CST Mass and Volume Information System. Knowing the Mass, Volume and Bulk density means you can be assured cargo fits before loading to avoid overfilling and material spills. With multiple options for viewing bulk density - real time, average per hold and average for the total ship - you can now complete each ship load in the minimum time with precise results.



Painted Mild Steel or Stainless Steel Industrial version



Stainless Steel Sloping roof Mining version



The Laser scanner gathers the cross sectional area as well as centre of load, centre of belt, surcharge angle and more. See scanned result real time on screen as shown

CONTROL SYSTEMS TECHNOLOGY

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HUNTER VALLEY

M: 0409 963 470

SERVICES AUSTRALIA WIDE

T: 1300 784 449

Control Systems Technology Pty Ltd service all brands of belt weighers at sites all over Australia and overseas.

Well trained technicians provide thorough recalibrations, trade verifications, audits and repairs to ensure equipment is performing as it should and to confirm the results are accurate.