

ScaleSensors 450SS

Weighing Indicator

A robust modular indicator for precise industrial weighing, operator-friendly setup and connected control-system integration.



Industrial weighing performance

Designed for precise load-cell measurement, modular configuration, Ethernet-enabled integration, trade-approved applications and configurable industrial I/O.

Key Highlights

RESOLUTION: 100,000 d @ 0.25 V/d

LOAD CELL INPUT: 16 x 350 ohm cells

CONNECTIVITY: Ethernet support

HOUSING: IP65 ABS or stainless steel

OUTPUT: Precise analogue output module

APPROVAL: Trade approved: AU, EU, USA

Configuration support: ScaleSensors can help match the 450SS with the required housing, communications, I/O, analogue output and data-storage options for your installation.

1. Product Overview

The 450SS is a flexible, installer-friendly weighing indicator for industrial applications where reliability, modular configuration and operator usability are priorities. The modular design allows the product to be commissioned with only the required components, reducing installation complexity, cost and service time.

Core Features

Simple setup

Configure via the alpha-numeric keypad or View400 PC configuration utility. Designed to reduce commissioning time for installers.

Operator friendly

Large multi-segment display with logical prompts, dedicated keys and programmable function keys. Supports tailored records, dockets and reports.

Rugged load cell input

High-capacity load-cell input with onboard transorb protection to help limit damage from external voltage surges.

Networking capability

Ethernet support for integration into larger control systems and connected weighing installations.

Housing Options

Select the housing style to suit the installation environment, from general protected areas through to stainless steel industrial installations.

Housing: Description and Rating

SS420

Description: ABS housing for general installations requiring IP-rated protection.

Rating: IP65

SS423

Description: Stainless steel panel-mount housing with high-impact polycarbonate LCD lens.

Rating: IP66

SS427

Description: Stainless steel full housing for robust industrial installations.

Rating: IP66

Customer Benefits

- Built for installers and operators: engineered for efficient commissioning and daily use.
- Modular accessory architecture: equip only the communications, I/O, storage and power features required.
- Reliable field operation: rugged housings and protected load-cell inputs help reduce downtime.
- Integration ready: Ethernet, serial, analogue and digital I/O options support PLC and control-system applications.

2. Modules, Connectivity and Accessories

The 450SS can be configured with isolated I/O, serial communications, Ethernet, analogue output and alibi storage modules to match the installation requirement.

Module Options

Module: Codes, Description and Key Specs

Input / Output

Description: Isolated I/O for direct PLC connection and low-voltage actuator control.

Key Specs: Up to 32 I/O; 8 ports/module; 30 V max input; 400 mA drive

Codes: M4301, M4311, M4321, M4331

Button Module

Description: Four voltage-free inputs for switches or thumbwheels without complex driver circuits.

Key Specs: 4 voltage-free inputs

Codes: M4302

Communication

Description: Additional isolated serial communications for installations requiring surge protection or extra ports.

Key Specs: RS232/RS232; RS232/RS485; RS485/RS485

Codes: M4201, M4202, M4203

Analogue Output

Description: Precise 4-20 mA or 0-10 V analogue output with two digital I/O for PLC integration.

Key Specs: 400 Hz update; 1/65,000 resolution

Codes: M4401

Data Storage

Description: Non-volatile alibi memory storage for regulated weighing records.

Key Specs: 6 MB; WELMEC 7.2 L

Codes: M4501

Ethernet

Description: Ethernet module for networked control systems and high-speed data integration.

Key Specs: 10/100/1000 Base-TX; USB 2.0 host; RS422

Codes: M4223-USERHW2

Accessories

Accessory: Use Case and Notes

Converter 0-10 V / 4-20 mA Input (M4902)

Notes: Input conversion

Use Case: Connects to the load-cell input for voltage or current input. Suitable for pressure, displacement or strain transducers with 4-20 mA or 0-10 V analogue output.

Opto-link

Notes: Setup, calibration, upgrades

Use Case: Magnetically coupled front-panel connection for temporary laptop access without opening the rear of the indicator.

Relay Module

Notes: 8 outputs; 250 VAC; 8 A

Use Case: DIN-rail relay module used with an I/O module. Provides voltage-free relay outputs for control and switching.

System Integration

Configure to suit the installation: Isolated I/O, serial communications, Ethernet, analogue output and alibi storage modules support PLC integration, control outputs, data storage and temporary service access without over-specifying the base product.

3. Technical Summary and Applications

The 450SS is suited to industrial weighing systems requiring robust measurement, flexible communications and configurable control-system integration.

Feature and Benefit Summary

Feature: Customer Benefit

Modular accessories

Customer Benefit: Buy only the functions required for the installation.

Large display and logical prompts

Customer Benefit: Improves operator readability and reduces training friction.

Protected load-cell input

Customer Benefit: Helps reduce damage from surges and external voltage events.

Ethernet support

Customer Benefit: Simplifies integration into larger control systems.

Analogue output module

Customer Benefit: Provides smooth PLC-readable output for process control.

Trade approvals

Customer Benefit: Supports regulated weighing use cases across target markets.

Typical Applications

- Industrial weighing systems
- PLC-connected weighing installations
- Crane scale input conversion
- Process measurement using pressure, displacement or strain transducers
- Trade-approved weighing applications

Configuration Path

1. Select housing

Choose ABS, stainless panel-mount or stainless full housing for the operating environment.

2. Add modules

Add I/O, serial, Ethernet, analogue output, button inputs or alibi storage as required.

3. Integrate system

Connect to PLCs, control systems, printers, reporting tools or service access workflows.

Need a quote or configuration advice? Contact ScaleSensors to confirm the correct 450SS housing, modules and accessories for your weighing system.