





# D4401S

**Compact Indicator** 



**Sasco** is a dynamic weighing solutions focused company which procures and supports a leading range of globally sourced industrial weighing technologies. Sasco has the highest metrological ranking of any Southern and Central African company, and as a result of our experience gained through 100 years of operation, we are uniquely positioned to specify and supply optimal weighing equipment, automation and weighing information data solutions to Southern and Central Africa's leading industrial companies. Sasco reputation has been built on innovation and choice underpinned by professionalism, modernity and experience.

### **GENERAL**

Innovative terminals, designed to satisfy the new requirements of a market in constant evolution. The D440IS electronic terminal ensures maximum ease of dialogue with the operator, thanks to a backlit graphic display which is extremely simple to use and offers the facility of changing the shape and size of characters to suit different operating conditions.

Rack-mounting and tabletop versions are available, both presenting similarly compact dimensions. This is a weighing terminal with a notably versatile range of use: from simple weight display to automation systems for industrial process.

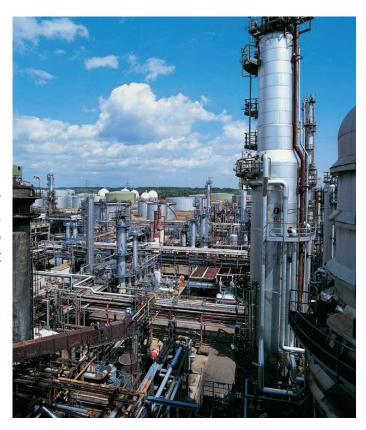


## **GENERAL**

The main terminal in stainless steel, provided with separate feeder consisting of a special container, that can be placed in a hazard zone up to a maximum distance of 10 m from the main terminal.

The terminal incorporates various operation possibilities, making it suitable for all weighing needs in places with explosion risk, from the display of weight to sophisticated management of codes and additional data or use with weighbridges also with "double weighing" and calculation of net weight.

The processed data can be transmitted at a distance thanks to the optional serial outputs, with optical fibre connections, thus enabling printing in a safe zone.



For applications in the automation field there are 4 input and output contacts, for management of load and unload set-points, or other programmable functions, such as: remote button for tare, weigh transmission, reset, etc.

For connections to PLC or other control devices, the options for analogue output in 4-20 mA current or serial output in the optical fibre can be included.

The terminal is equipped with a polyester 18-key alphanumeric keypad with IP65 protection rating, for selecting functions, weighing operations and entering alphanumeric descriptions.

The D440IS can be used as a repeater in hazard zones, by placing a terminal provided with a safety barrier in a safe zone.\*

## THREE VERSIONS ARE AVAILABLE:

- standard version with 230 Vac input and special versions with 115 Vac or 24 Vac input.

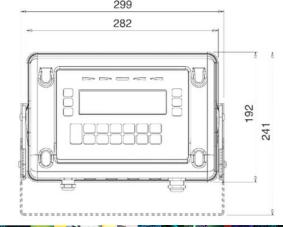
In the weighing terminal, the electronic components are housed in a compact AISI 304 stainless-steel case for wall, post or table mounting, depending on the version chosen.

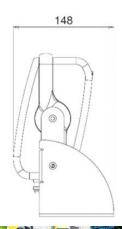
Equipped with EC approval in conformity with Directive 2014/31/UE and ATEX certificate, it can be connected to any type of analogue load cell.



### TECHNICAL CHARACTERISTICS OF TERMINAL D440IS

- Weighing terminal with intrinsic safety suitable for use in hazard zones with the presence of potentially explosive gases (G) or dusts (D).
- Protection methods: with intrinsic safety (Exi)
- Operating zones: Zone 0, 1, 2 and Zone 20, 21, 22
- Certificate: CESI 05 ATEX 022X
- Marking:
  - II 1G Ex ia IIC T5 Ga
  - II 1 D Ex ia IIIC T100°C Da IP54 Tamb (-20°C ÷ + 55°C) -> T5/T100°C
- Power supply (standard): 230 VAC, 50 / 60 Hz, 20 VA by means of feeder PS440/230 VAC
- Operating temperature (for use in connection with third parties): -10°C / +40°C.
- Storage temperature: -20°C / +70°C
- Analogue load cell power supply: less than 6 Vdc by means of voltage/current limiter; min. impedance 87 ohm
- Max. cell voltage 23 mV
- 6-wire load cell connection with 'sense'
- Max. external resolution: 4,000 div. OIML (for use in connection with third parties); 10,000 div. (for use not in connection with third parties)
- 8 Hz analogue filter; automatically variable digital filter
- Calibration with the possibility of using a 'linearization' function (max. 5 points)
- 4 optoisolated inputs exi (single common), control for 4 outputs (present on PS440/xxx)
- Command for N.°3 Exi outputs(present in PS 440 A/xxx)
- Clock, permanent calendar
- Backlit graphic display dimensions 135 x 32 mm
- Polyester 18-key alphanumeric keypad
- Protection rating: IP65 frontal panel, IP54CASE
- Wall or table mounting terminal fixing kit
- Complies with Directive 2014/34/UE (ATEX)
- Complies with Directive 2014/35/UE (LVD)
- Complies with Directive 2014/30/UE (EMC)
- Electromagnetic immunity in compliance with Standard EN45501
- Immune to irradiated electromagnetic fields of up to 10V/m





# **TECHNICAL CHARACTERISTICS OF FEEDER PS 440-A, 230 VAC**

- Weighing terminal with intrinsic safety suitable for use in hazard zones with the presence of potentially explosive gases (G) or dusts (D).
- Protection methods: with increased safety (Exe), by means of encapsulation (Exm), with intrinsic safety (Exi)
- Operating zones: Zone 1, Zone 21, Zone 2, Zone 22
- Certificate: CESI 05 ATEX 023
- Marking:
  - II 2 (1)G Ex e mb [ia Ga] IIC T5, T4 Gb
  - II 2 (1)D Ex tb mb [ia Da] IIIC T100°C, T135°C Db
  - Tamb(- 20°C ÷ + 40°C) T5/T100°C
  - Tamb(- 20°C ÷ + 55°C) T4/T135°C
- Power supply (standard): 230 VAC, 50 / 60 Hz, 20 VA
- Operating temperature (for use in connection with third parties): -10°C / +40°C
- Operating temperature (in hazard zones): -20°C / +55°C
- Storage temperature: -20°C / +70°C
- Protection rating: IP66
- PS 440 Version:
  - 4 relay outputs (separate "common", command coming from D440IS) Max. 110 Vac 200 mA
- PS 440-A Version: n°3 Exi outputs Mos output
- Complies with Directive 2014/34/UE (ATEX)
- Complies with Directive 2014/35/UE (LVD)
- Complies with Directive 2014/30/UE (EMC)
- Electromagnetic immunity in compliance with Standard EN45501
- Immune to irradiated electromagnetic fields of up to 10V/m
- PS 440 / 115 Vac for 115 Vac network input / PS 440 / 24 Vac for 24 Vac network input



# **FUNCTIONAL CHARACTERISTICS (STANDARD VERSION)**

- Weight display with variable height digits (16/32 mm)
- Language selection for messages (6 languages)
- Weighing system self-diagnostic function
- Automatic tare' weigh function by means of key, serial channel, or associated Input
- Predetermined tare' function by means of keypad
- Reset by means of key, serial channel, or associated Input
- Weight value transmission and additional data
- Personalization of more frequently used functions for direct access by means of an alphanumeric keypad
- Sum weighing
- Management of product codes with associated alphanumeric description (max. 20 characters)
- Management of a generic alphanumeric code
- Management of Multiple Tares
- Possibility of totalization for a code or preselected function
- Connection to all printer models supplied by Sasco Africa (optical fibre Serial option necessary)
- Weight control function with the management of limits associated with product code (max. 500 codes)
- "Manual selection" function with the management of up to 15 weight ranges
- "Double weighing" operation

Specific functions are available by request, such as the "Extraction function" that provides for loading a container on the scale and after activation of an input (start), the terminal resets the tare and closes an output contact to activate filling of the container until the set value is reached (also possible with 2 speeds)

### **OPTIONS**

- MPP permanent weights memory
- Analogue output in the current (or else serial output in optical fibre) having the following characteristics: intrinsic safety circuit 4-20mA current internal or external power supply
- Serial output in optical fibre (instead of analogue output) having the following characteristics:
- 2 bidirectional channels, one of which also suitable for optical ring connection for network of terminals managed by PC; PC interface in safe zone, transmission speed 9600 to 115000 baud (in relation to section attenuation); max. distance with low attenuation fibre: 500 m
- Support for compact wall mounting
- Printer (Sasco Africa range) for connection in safe zone via optical fibre

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