



# SILOSMART4X



COMPLETE KIT FOR SILO WEIGHING  
EASY, PRECISE, RELIABLE



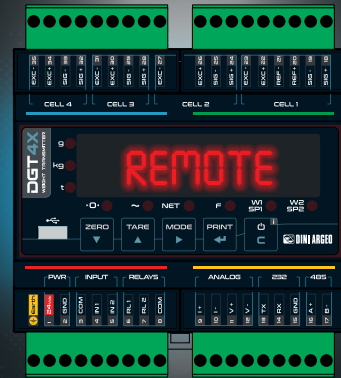
 **DINI ARGEO**  
Scales - Weighing systems

A RICE LAKE WEIGHING SYSTEMS COMPANY

# SILOSMART4X



PLC INTEGRATION



DINI ARGEO INDICATOR  
DGT4X

## THE WEIGHING KIT FOR SILOS

SILO SMART 4X is the Dini Argeo solution created specifically for people who have to weigh silos. Resistant, easy to install and of high quality, SILO SMART 4X is suitable for all silo weighing applications and allows precise and reliable weighing and weight diagnostics, even remotely.

FOR SILOS UP TO 400 TONNES.





**LOAD CELLS**  
AND DINI ARGEO ASSEMBLY KIT



REMOTE CALIBRATION



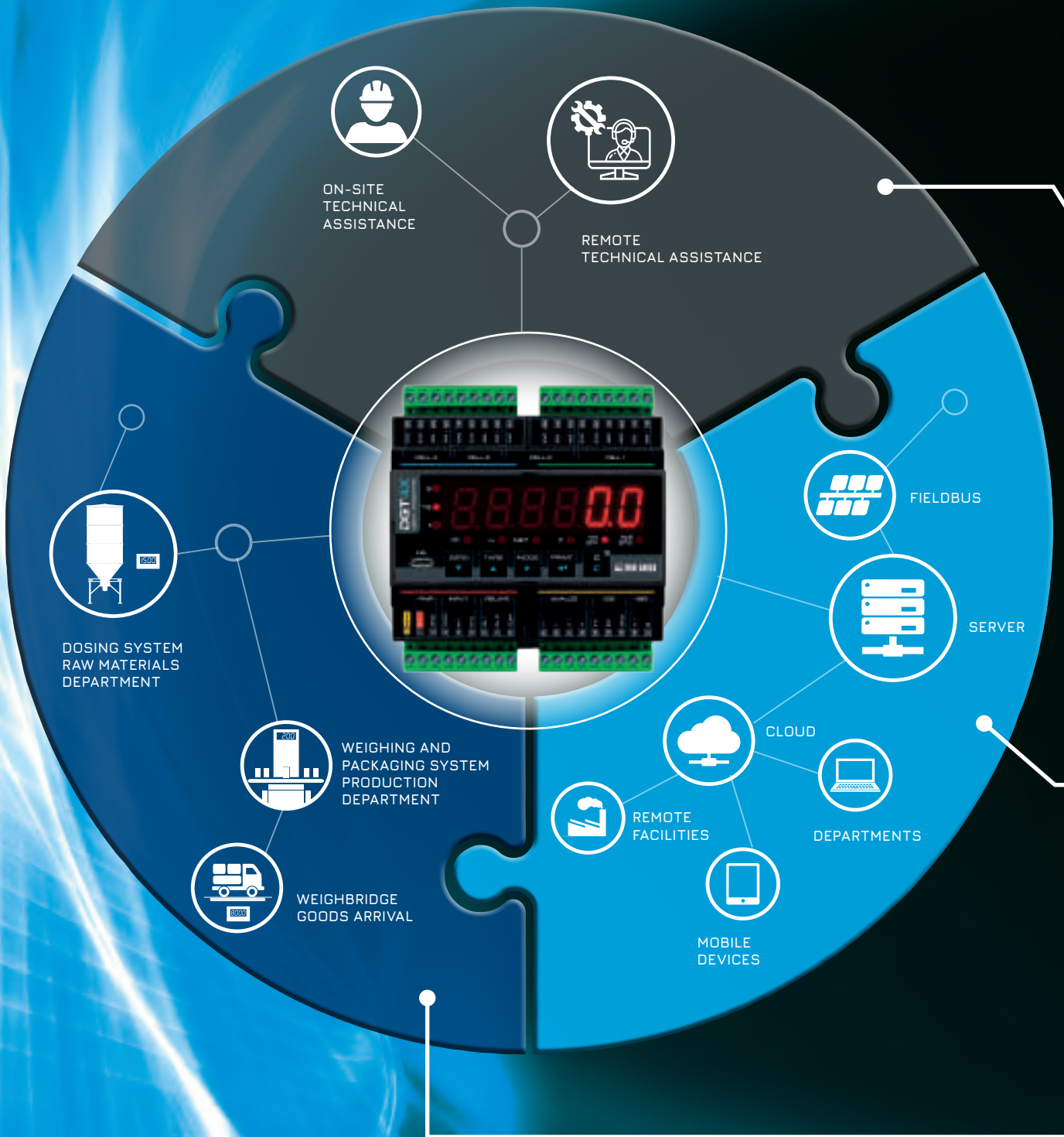
DIAGNOSTIC MENU



REMOTE TECHNICAL ASSISTANCE



# DGT4X





## JUST ONE PRODUCT, 3 ADVANTAGES

The DGT4X allows you to integrate weighing into any industrial automation system and to receive technical assistance even remotely.

1

The DGT4X transmits weighing data via fieldbus to PLC and can be integrated into any industrial system.

2

The integrated web server allows you to monitor silo weight data in real time via the Internet, and to carry out **diagnostics and maintenance** using our team of specialised technicians in 130 countries around the world.

3

The DGT4X allows to read weight data from up to 4 silos. The weighing of a single silo is performed without a junction box.

## VIBRATION RESISTANT

Agitators, mixers and augers generate vibrations that can disturb your weighing operations. The cutting-edge technology of the new DGT4X makes it possible to filter vibrations, obtaining high-precision weight values in all conditions.

### FEATURES

- Removable clamps
- 4 load cell inputs
- Fieldbus, with which you can collect weighing data and calibrations
- RS485 serial port, always available with fieldbus for the management of digital cells
- Integrated web server, which allows remote communication and diagnostics/calibration of the transmitter.

### XSPEED TOOL





## ASSEMBLY KIT

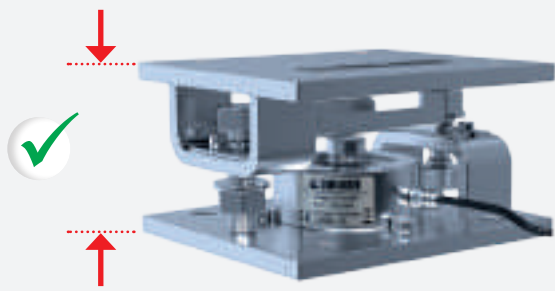
# EASE OF INSTALLATION

### A FEW SIMPLE STEPS

The strength of this kit is the ease of installation of each of its components. This allows you to avoid downtime, minimise assembly time and speed up maintenance activities.

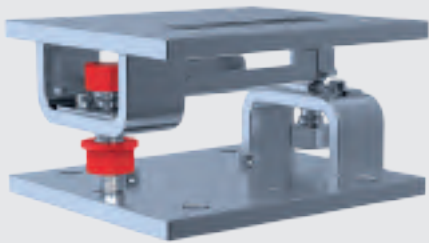


# 1



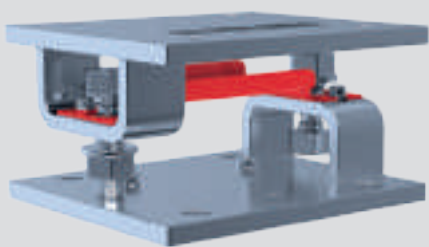
Low profile, which minimises the overall height variation of the system and makes the kit easy to install even when space is limited.

# 2



Dual-function supports: bypass to support the load during silo installation, maintenance and transport activities, and anti-tipping when the cell is in operation.

# 3



Self-centring plate that simplifies the installation and positioning of the kit even without the load cell.

# 4



Easy removal of the cell thanks to the locking nuts.

# THE COMPONENTS OF THE SILOSMART4X

## DINI ARGEO LOAD CELL AND ASSEMBLY KIT

Designed to ensure the correct operation of the load cell and to guarantee optimal weighing accuracy and high measurement reliability over time.

It guarantees the correct installation/removal of the load cell even when the kit is already installed and ensures that the load is always applied in the best point for weighing, compensating for any misalignment.

## CPX and CPA LOAD CELLS

- Stainless steel
- IP68 protection rating against dust, water and humidity, for use in harsh industrial environments or those with strict hygiene requirements
- Extremely resistant and compact in size, available in legal-for-trade version.



### TECHNICAL FEATURES

	CPX	CPA
Accuracy class	C3	C3
Protection rating	IP68	IP68
Material	Stainless steel	Stainless steel
Combined error	0,05%	--
Nominal rated output	2mV/V ± 0,5%	2mV/V ± 0,1%
Temperature effect on zero	0,02% / 10°C	0,001% / °C
Temperature effect on full scale output	0,02% / 10°C	0,0013% / °C
Compensated temperature range	-10°C / +50°C	-10°C / +40°C
Operating temperature range	-20°C / +60°C	-30°C / +85°C
Creep at nominal load after 30 min	0,02% F.S.	0,03% F.S.
Nominal range of excitation voltage	5-15 Vdc	5-15 Vdc
Input resistance	750 ± 10 Ohm	1100 ± 50 Ohm
Output resistance	700 ± 5 Ohm	1000 ± 10 Ohm
Insulation resistance	>5000 MOhm	>5000 MOhm
Safe overload	120% F.S.	150% F.S.
Shielded cable, Ø 5 mm	4 pins - L 5 m (CPX 250 ... 5000)	6 pins - L 5 m (CPA 150 ... 10000)
	4 pins - L 10 m (CPX 7500 ... 100000)	--





## KCPN ASSEMBLY KIT

- AISI 304 stainless steel structure, for use in any industrial environment, even corrosive, and to meet food industry requirements.
- High resistance to lateral forces
- Available in ATEX version for zones 1 & 21, 2 & 22 (for AISI 304 stainless steel version).



### OPTIONS/ACCESSORIES

- Certified version EN 1090
- Optional tensioner to protect the cell from stress due to expansion and contraction
- Anti-vibration plate
- Dummy load cell for mechanical testing and weighing of liquids.



### TECHNICAL FEATURES - ASSEMBLY KIT (WITH CELL)

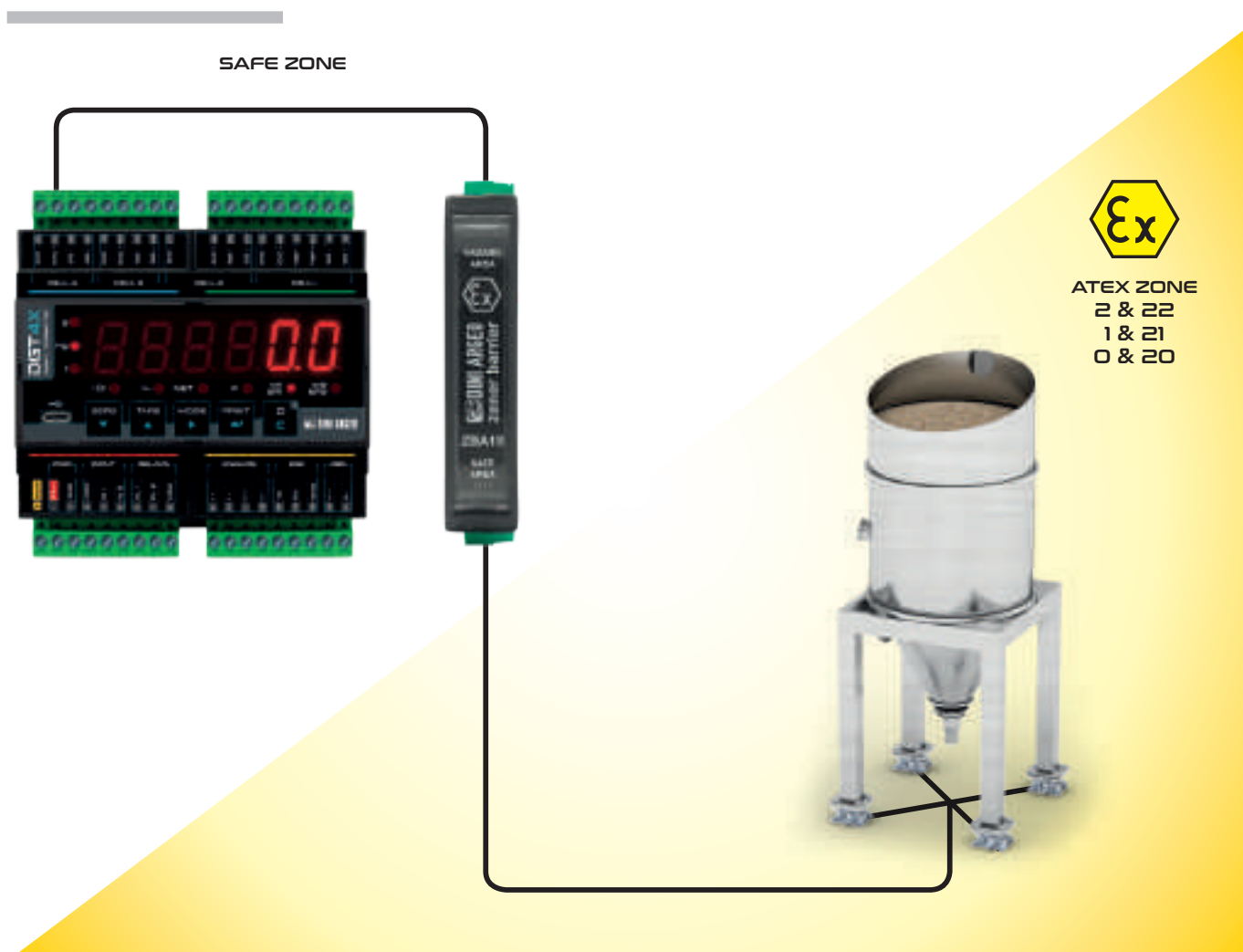
Material	Nickel-plated steel	AISI 304 Stainless steel
Weight (kg)	7	8
Compression safety load	120 kN	120 kN
Compression tensile strength	55 kN	55 kN
Traction safety load	45 kN	45 kN
Traction tensile strength	55 kN	55 kN
Safety load across the plate	20% of the load applied max 25 kN	20% of the load applied max 25 kN
Tensile strength across the plate	30% of the load applied max 35 kN	30% of the load applied max 35 kN
Maximum tilt angle of the support plate	+/- 1°	+/- 1°
Compensating for any expansion/contraction	+/- 3 mm	+/- 3 mm
ATEX Ex marking (upon request)	--	Ex II 2GD X

# ALSO FOR ATEX ENVIRONMENTS

## STRENGTH, RELIABILITY AND SAFETY

The SILO SMART 4X solution by Dini Argeo is also available for ATEX environments with certified cells for weighing in hazardous areas zone 1 & 21 and 2 & 22, in compliance with European Directive 2014/34/EC.

Dini Argeo is also able to provide any certification or declaration of conformity in order to guarantee the customer the safety of the system purchased and at the same time to provide a complete service to speed up the development or installation time.



Electronic versions are also available that can be installed in hazardous areas.



## ATEX SOLUTIONS FOR OVER 20 YEARS

Dini Argeo is an international reference point for the realization of weighing systems for hazardous areas.

The investments in research and development and staff training, started towards the end of the 90's, allowed the company to broaden its skills until obtaining the ATEX notification in 2004.

Today Dini Argeo boasts the widest range of ATEX solutions available on the market, for every weighing need, with over 50,000 installations worldwide and a series of IECEX certified products for the international market.



### WHAT DOES IT MEAN TO BE AN ATEX NOTIFIED COMPANY?

The Notification of quality assurance of the production process, according to Annex IV of the ATEX Directive 2014/34/EU, attests the validation of the Quality System for company production by an ATEX Notified Body.

The validation of the quality system is renewed annually, through an inspection carried out by a third-party body in charge. Each ATEX certified product is checked by specialized technicians through specific tests, mechanical and electrical verifications. Being an ATEX Notified Body also means keeping your staff up to date with all the news and changes in the regulations, through training courses, consultancy and constant study of new regulations.



### A TEAM OF ATEX SPECIALISTS AT YOUR SERVICE

Each ATEX marked product undergoes a scrupulous quality control, which guarantees its safety once installed in an hazardous area.

The testing of the products is entrusted to a specialized team coordinated by a product manager with over 20 years of experience. Dini Argeo also has all the necessary instrumentation to perform the tests required by the regulations.

“YOUR WORLDWIDE PARTNER FOR WEIGHING”



A RICE LAKE WEIGHING SYSTEMS COMPANY

#### COMPANY HEADQUARTERS

Via Della Fisica, 20  
41042 Spezzano di Fiorano - Modena - Italy  
Tel. +39.0536 843418

#### SERVICE ASSISTANCE

Via Dell'Elettronica, 15  
41042 Spezzano di Fiorano - Modena - Italy  
Tel. +39.0536 921784

#### OTHER DINI ARGEO LOCATIONS

DINI ARGEO WEIGHING INSTRUMENTS Ltd  
China

DINI ARGEO UK Ltd  
United Kingdom

DINI ARGEO FRANCE sarl  
France

DINI ARGEO GMBH  
Germany

## WHY CHOOSE DINI ARGEO?



#### WORLDWIDE SERVICE AND SHIPPING

International group with offices in America, Europe, India, China, Mexico and Oceania, over 900 employees and a network of specialised partners in 130 countries worldwide.



#### FAST SHIPPING

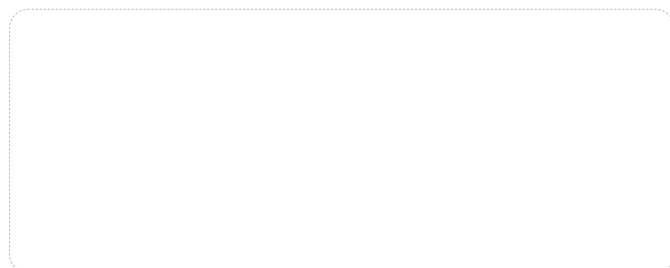
Dini Argeo always keeps complete systems in stock that can be shipped quickly.



#### MADE IN ITALY

Dini Argeo weighing solutions are made in Italy and guarantee the highest quality standards.

#### SALES SERVICE AND TECHNICAL ASSISTANCE



Mod **SILOSM-CEN**

P/N   
SILOSM-CEN

Sn   
NOSN

  
SILOSM-CEN/NOSN

Rev. 01.03.2023