



MODBUS RTU MODBUS/TCP



# WEIGHT INDICATOR MCT1302



**Pavone Sistemi**  
pesatura elettronica industriale

# MCT 1302

## WEIGHT INDICATOR



**Pavone Sistemi** is one of the pioneers of industrial weighing, operating in the market of weighing and batching since 1963, with customized products for many different industries.

Thanks to a thorough study of needs and requirements of the market and the support of an internal research and development laboratory Pavone

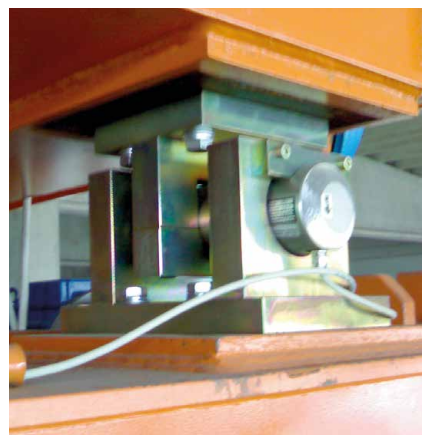
Sistemi is able to achieve reliable measurement products, with a value/price advantage, certified and comply with industry standards.

All our products can interface with PC and PLC of the most important international brands - Siemens, Omron, Schneider, Bosch Rexroth, Panasonic, Rockwell Automation, Allen-Bradley, B&R Automation,

Beckhoff, Mitsubishi - by most common fieldbus on market - Profibus, Profinet, Ethernet IP, Ethercat, Devicenet, Canopen -. For any need related to weighing, batching, measurement Pavone Sistemi has an optimal solution.

**In product development we have a bottom-up approach. Thanks to our everyday activities on the field we collect the real needs of the market and we transfer these needs in the product we develop and manufacture.**

**Our products are easy to use, options offered are useful in the everyday activities and thanks to our expertise, knowledge and experience we make your work easier.**





Hereafter you will find the mainstream load cells & the mounting kit designed and manufactured in Italy we offer to our best clients for their industrial weighing needs.

## OUR OFFER: **LOAD CELLS + MOUNTING KITS + ELECTRONICS**

### SHEAR BEAM



65023



SBR

### DOUBLE ENDED



DDR

### ELECTRONICS



MC 355



UWT 6008



MCT1302



MCT 1302

### MOUNTING KIT



MKX



MH

### MOUNTING KIT



DE

FOR CUSTOM LOAD CELLS & OTHER TYPES OF LOAD CELLS,  
VISIT OUR WEBSITE AND CALL US.



**Pavone Sistemi**  
pesatura elettronica industriale

## OUR OFFER: **LOAD CELLS + MOUNTING KITS + ELECTRONICS**

### SHEAR BEAM



PS24



CC3

### DOUBLE ENDED



BBR

### MOUNTING KIT



MKX



MH

### MOUNTING KIT

### ELECTRONICS



MC 355



UWT 6008



MCT1302



MCT 1302

FOR CUSTOM LOAD CELLS & OTHER TYPES OF LOAD CELLS,  
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# ELECTRONICS MCT 1302

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IT CAN BE CONSIDERED ONE OF THE WORLDWIDE BEST SELLER WEIGHT TRANSMITTERS, 100% MADE IN ITALY.



**ACCORDING TO THE TYPE OF SOFTWARE  
UPLOADED MCT 1302 CAN BE GOOD FOR:**

- 1]** STATIC WEIGHING
- 2]** BATCHING
- 3]** STATIC WEIGHING A+B (double channel instrument)
- ...** SOON BELT WEIGHING



Pavone Sistemi  
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Hereafter the main strengths and characteristics:

**FREQUENCY ACQUISITION ADC SIGNAL UP TO 1000 HZ**

DISPLAY RESOLUTION 999.999 DIVISIONS

**UPLOAD/DOWNLOAD WITH OPTIMATION® SOFTWARE OR UBS SERVICE OR NFC**

FIELDBUS AVAILABLE: PROFINET, ETHERNET, ETHERNET IP, DEVICENET, ETHERCAT

**SUITABLE FOR BATCHING SOLUTION**

THEORETICAL OR DEADLOAD CALIBRATION

**SUITABLE FOR EVERY TYPE OF INDUSTRY**

IDEAL TO BE USED FOR WEB TENSION SYSTEMS

**ANALOGUE & FIELDBUS: BOTH OPTIONS AVAILABLE AT THE SAME TIME**

DEVELOPED FOR STATIC WEIGHING AND BATCHING

**CUSTOMIZABLE INTERFACE**

6 INPUTS AND 6 OPTO OUTPUTS

**INTERNAL MEMORY EXPANDABLE UP TO 1024 KBYTES**

PULL-OUT TERMINAL BLOCKS FOR EASY CONNECTION

**INTERNAL DATA LOGGER FUNCTION ON INTEGRATED MEMORY AND ON EXTERNAL PC FOR MONITORING THE CHANGE OF DISPLAYED WEIGHT**

DOUBLE PORT DEDICATED TO THE FIELDBUS TO ALLOW AN EASY CONNECTION OF MULTIPLE TOOLS WITHOUT THE USE OF A HUB

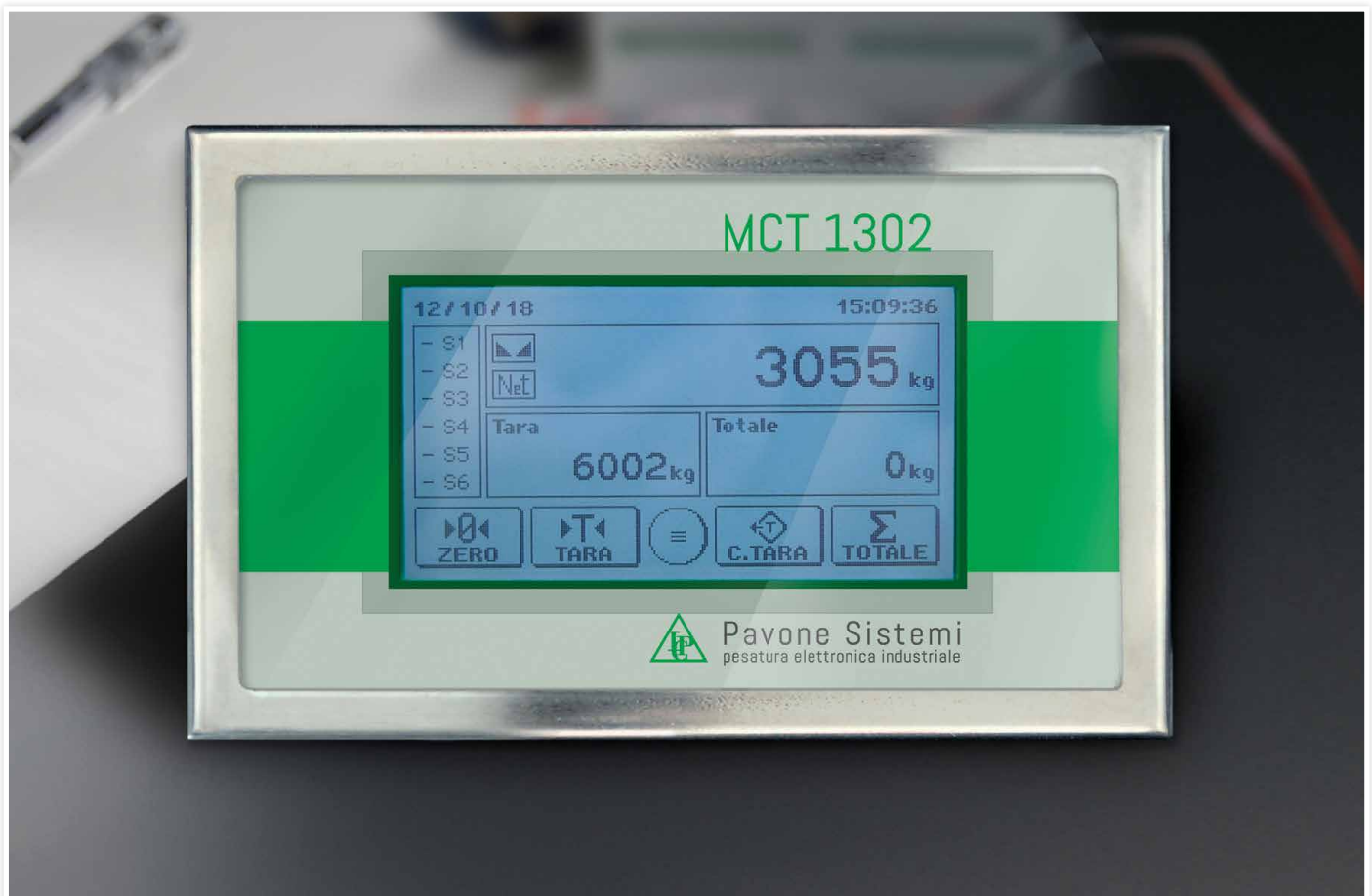
**PANEL MOUNT VERSION**

INFO (& TEST) FUNCTION: FOR HAVING ALL THE INFO ALWAYS AVAILABLE



# ELECTRONICS MCT 1302

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## 1] STATIC WEIGHING



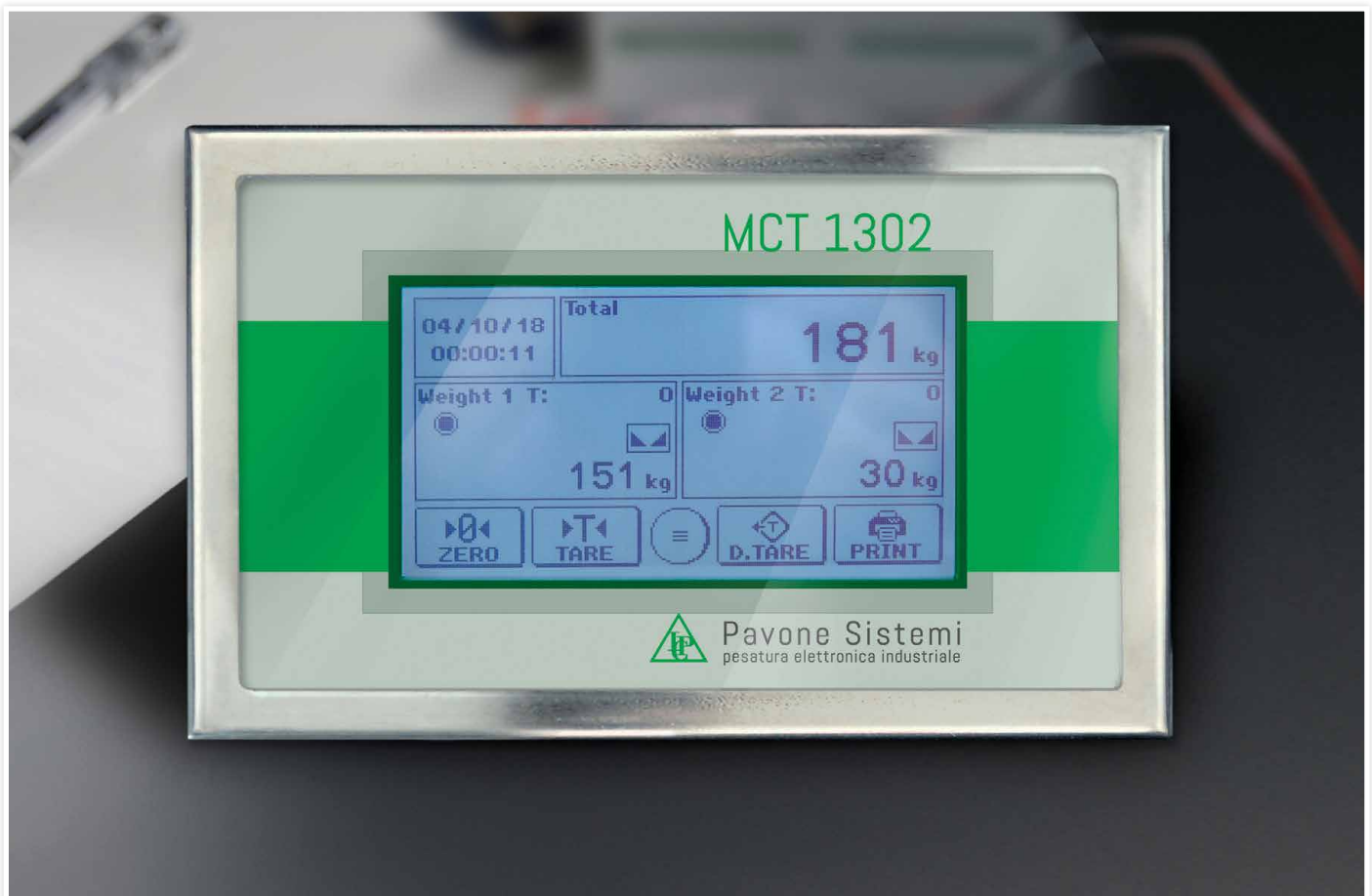
Pavone Sistemi  
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# MCT 1302



## 2] BATCHING





### **3] STATIC WEIGHING A+B** (double channel instrument)



# OPTIMATION<sup>®</sup>

THE **CHANGE** OF PERSPECTIVE

WHAT MAKES **MCT1302** DIFFERENT FROM ANY OTHER PRODUCT IS THE **OPTIMATION<sup>®</sup>** SOFTWARE, SUPPLIED BY **PAVONE SISTEMI** FOR FREE WITH THE PRODUCT. THE OPTIMATION IS A CHANGE OF PERSPECTIVE.

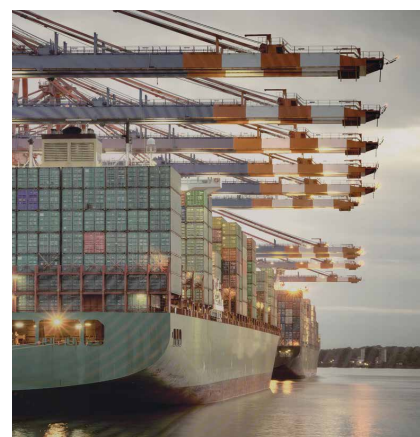
**THANKS TO THIS SOFTWARE ALL THE OPERATIONS CONNECTED WITH THE PRODUCT CAN BE DIRECTLY MANAGED FROM THE PC.**

**THIS SOFTWARE CAN BE USED FOR READING AND PROGRAMMING DATA OF DAT1400 VIA USB CONNECTION.**

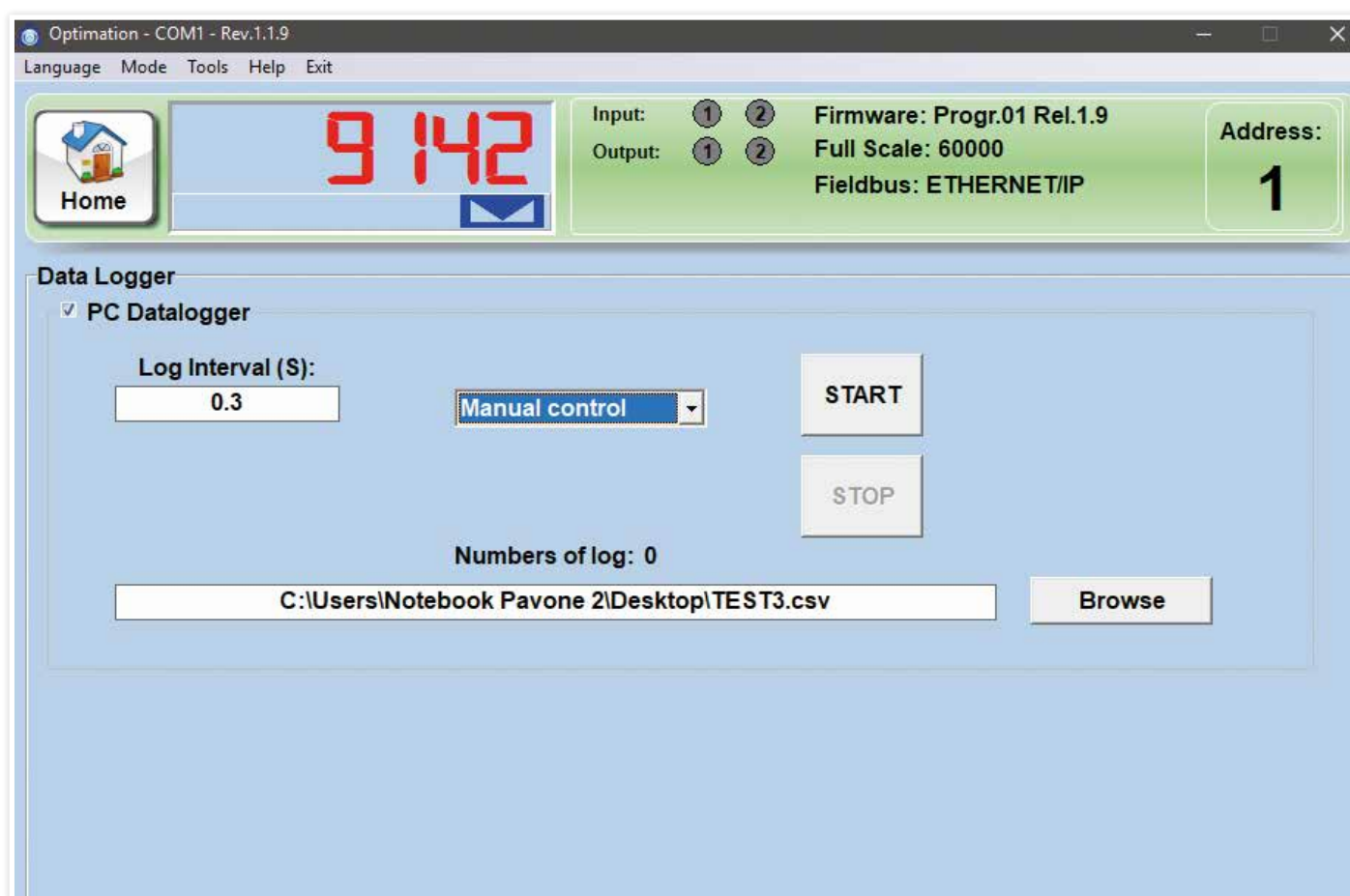
**DEVELOPED WITH A BOTTOM-UP APPROACH; THE RESULT IS AN INTUITIVE AND USER FRIENDLY SOFTWARE. IT IS EASY TO USE.**

#### **THE MAIN FUNCTIONS OF THE SOFTWARE:**

- SET-UP
- CALIBRATION
- FILTERS MANAGEMENT
- TESTING THE INPUTS, THE OUTPUTS AND THE ANALOG
- ACQUIRING WEIGHT VALUES AND EXPORTING TO .CSV
- DATA LOGGER FUNCTION
- DATA BACK UP
- RESTORE PREVIOUSLY SAVED DATA



## LET'S FOCUS ON SOME POINTS.



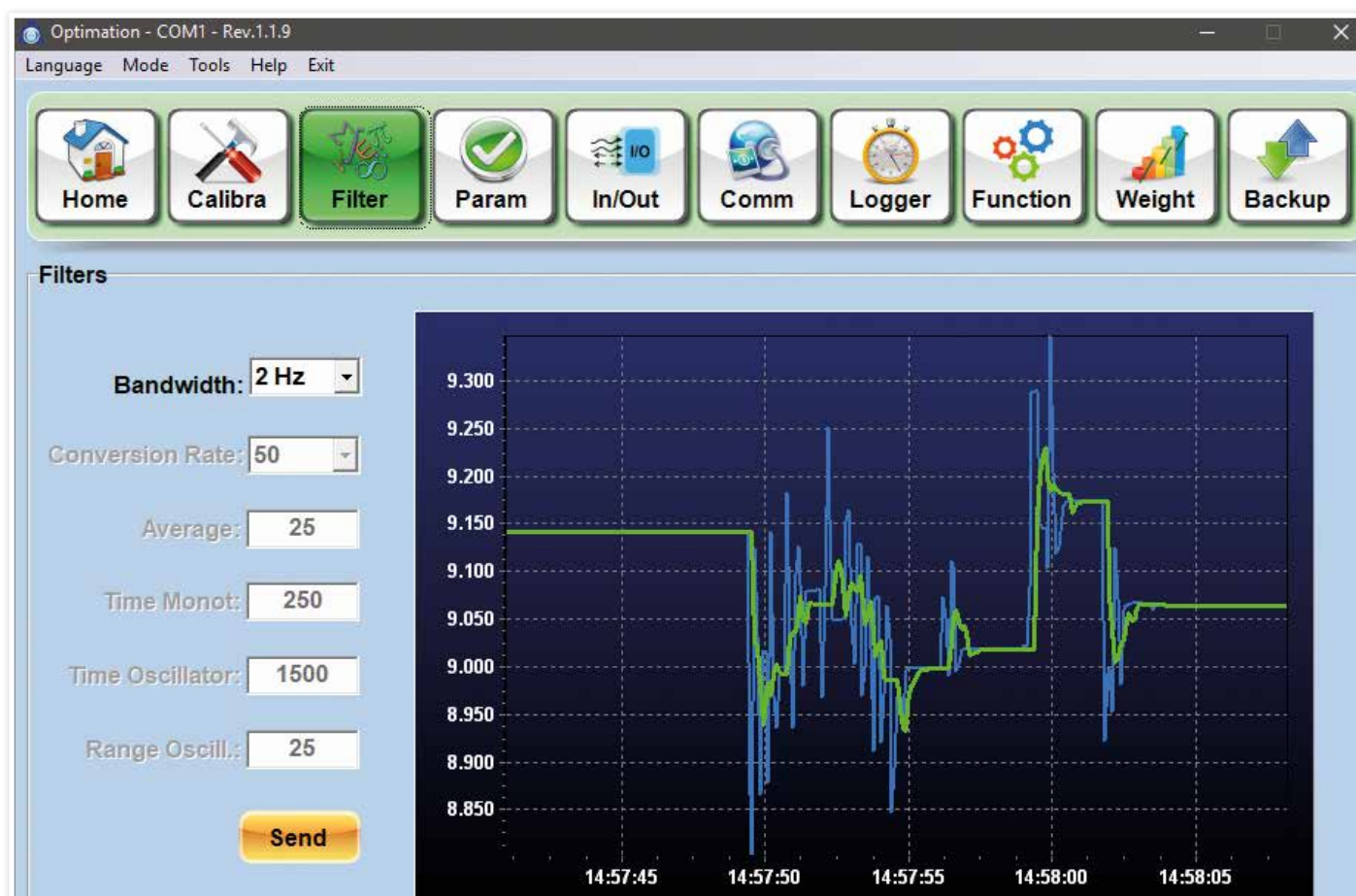
### Data logger:

the functionality of the data logger already present in the **MCT1302**, in which i can choose the defined timing or customize the interval for starting and stopping the reading and recording the weight value (on optional alibi memory), is enhanced by the **OPTIMATION®**

software provided with the instrument, by connecting the **MCT1302** via usb to the pc on which optimisation is installed, in a simple and intuitive way you will find a complete monitoring and verification station. You can configure the time

intervals using a user friendly interface, define where to save the file with the recording of the weighs, date and time of each survey, perhaps on a network file that is visible and can be consulted by more people if necessary.

## LET'S FOCUS ON SOME POINTS.



### Filters:

the **DAT1400** allows you to optimize the weighs by using the **FILTER** function that combined with a reading speed up to 1000Hz guaranteed by our latest generation of internal digital analogue converter, will allow you to obtain more accurate and repeatable results as well as a

fast and stable reading. There are pre-configured filters that respond to the main applications (weighing of: mixers, turbo emulsifiers, vibratung tanks, stations on start & stop belts, etc.), as well as the possibility of a fully customizable filter.

As for the **DATALOGGER** function, also in this case the **OPTIMATION®** software supplied

becomes a "gem" to manage the configuration parameters, to test and view the answers of the "filtered" instrument.

All supported by a graph that in real time will show you the differences between the values filtered and not, helping you in case you use the custom filter in the configuration of the individual parameters.



## LET'S FOCUS ON SOME POINTS.

Optimation - COM1 - Rev.1.1.9

Language Mode Tools Help Exit

Home

9064

Input: 1 2 Output: 1 2

Firmware: Progr.01 Rel.1.9

Full Scale: 60000

Fieldbus: ETHERNET/IP

Address: 1

Functions

Standby

☐ Active 0 Seconds

Keyboard Lock

SET FUN

☐ Lock ☐ Lock ☐ Lock ☐ Lock

Application Color

Reset Default

Clock Settings

05/05/2016 08:29

Menu Pin Code

☐ Active 0

Peak Settings

OFF

Memory settings

NO

Operational mode

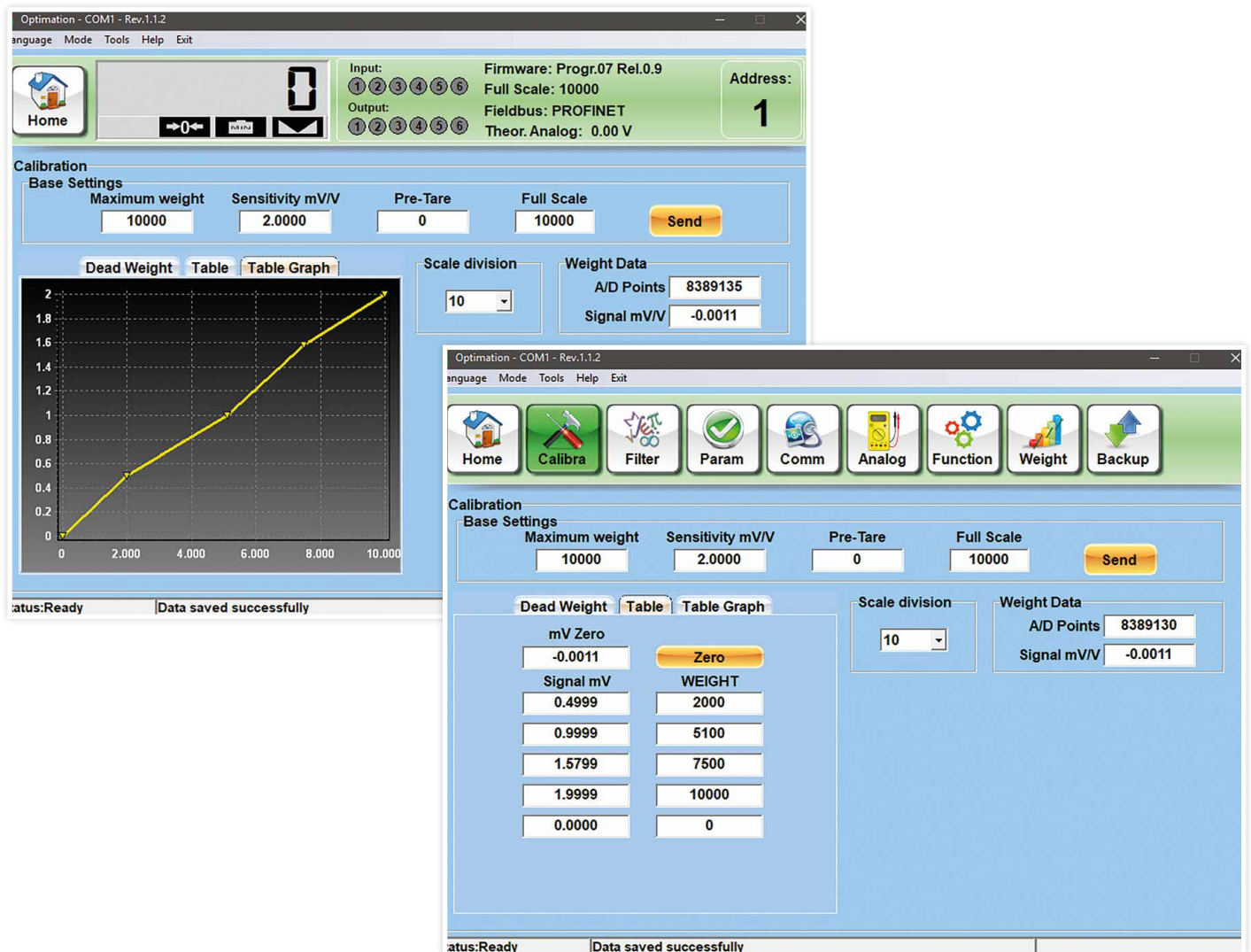
FREE

Send

Thanks to Optimation it is possible to lock the **DAT1400** keyboard from the pc, so that people operating on the field cannot modify the parameters

setted before.  
In this way MCT1302 will display the weight and nobody on the field will be able to mistaken data inserted by specialist operators.

## LET'S FOCUS ON SOME POINTS.




### Table calibration:

table calibration is another feature that makes the **MCT1302** a unique tool. The possibility of attributing to a force, a certain defined weight value, allows this transducer to be used in many applications.

An example is the tensiometric systems where the values read by

the load cells are not translatable by weight except by calculations that should be done at each reading, slowing down the process of weight acquisition.



Through the software  **Recipes** you can create, offline, the recipes, inserting all the variables the quantities necessary to obtain the desired product. Then connecting the instrument via USB you can upload them directly to the instrumen



Recipes Ver.1.0. Attività

File Porta Exit

**Recipes.db**

Numero	Desc
1	

### Attività N.: 1

Descrizione:

Tipo Attività: **DOS.AUTO** ▼

Lento:       Volo:       Tolleranza:

Tempo Attesa:       Timeout Prodotto:


Spillamento On:       Spillamento Off:       ingresso:

Uscita Veloce:       N.APERTA ▼

Uscita Lenta:       N.APERTA ▼

 **ESCI**       **SALVA**

Leggi  
Scrivi  
Leggi DB  
Salva DB

Furthermore it is possible to save all the  Recipes contained in the instrument and store them in the PC.







Recipes Ver.1.0.1 - MCT1302 Pr.07 Rel.0.9

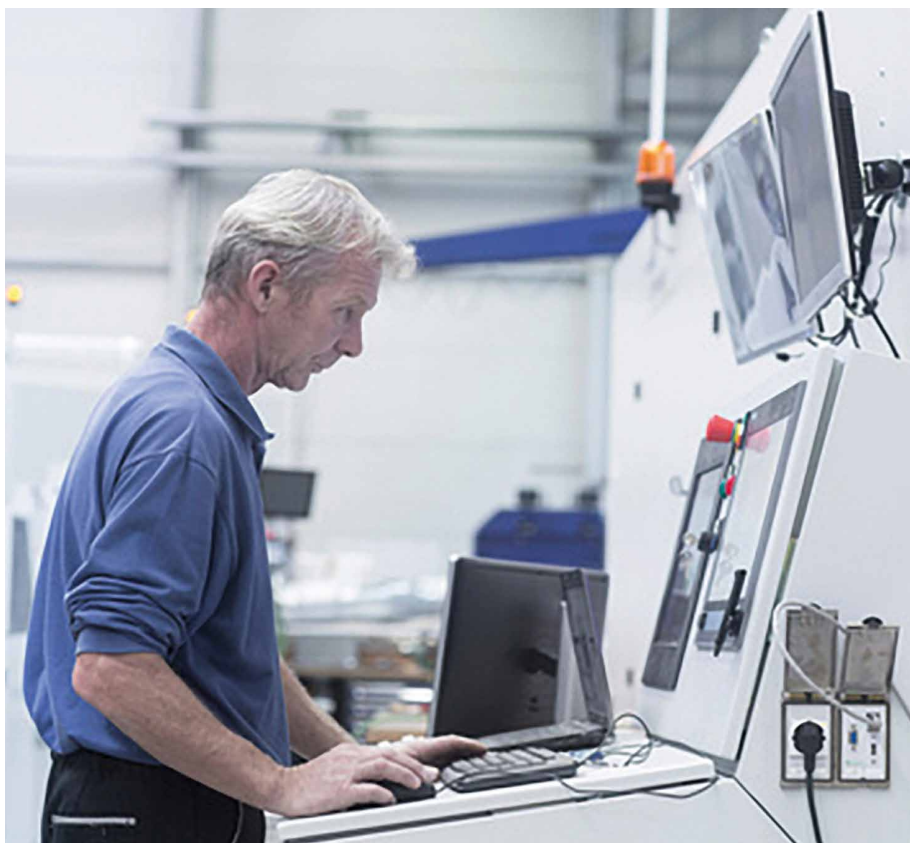
File Porta Exit

**Recipes.db** ATTIVITA RICETTE **PARAMETRI**

<b>Controllo Zero</b> 0	<b>Soglia Scarico</b> 0	<b>T. agg. Scarico</b> 0.0
<b>T. Fine Scarico</b> 0.0	<b>T. Fine Ciclo</b> 0.0	<b>T. Att. Fine Ciclo</b> 0.0
<b>Modo Fine Dos</b> Normale ▾	<b>Modo Correzione</b> Fattore ▾	<b>Livello Minimo</b> 0
<b>Livello Massimo</b> 0	<b>Out Liv.Min.</b> 0	<b>Out Liv.Max.</b> 0
<b>Out Ciclo</b> 0	<b>Out Fine Ciclo</b> 0	<b>Out Allarme</b> 0
<b>Modo Timer</b> Secondi ▾		

 Leggi  
 Scrivi  
 Leggi DB  
 Salva DB

This function is useful if you have to create a twin system or in the event of a machine stop (the instrument, for example, is broken and then all the saved items can be recharged without rewriting everything).



All other functions are manageable via **OPTIMATION®**



## WHERE IT CAN BE USED OUR SOLUTIONS:



### STEELWORKS

From a historical point of view, the steel industry is the most important sector for Pavone Sistemi. The first applications of weighing equipment made with Pavone Sistemi date back almost 40 years ago. Today the Pavone Sistemi production includes load cells, mounting hardware, weight transmitters for PC/PLC, weight and batching indicators and weighing systems specifically designed for maximum efficiency and performance in this area.



### ENVIRONMENT

Pavone Sistemi was one of the first companies to provide its expertise in the field of weighing for the realization of plant in the ecological sector: recycling of raw materials, fume treatment plants for the production of energy from renewable. Precision and accuracy, these are the main characteristics of the systems that Pavone Sistemi provides to companies that work for the Environment



### PLASTIC

From a historical point of view, the Pavone Sistemi is able to develop custom load cells, able to adapt to the needs of the customer. Pavone Sistemi offers a wide range of indicators and weight transmitters, capable of interfacing to PC/PLC or dedicated boards using the main field bus on the market (Modbus RTU, Profibus DP, PROFINET, Ethernet, DeviceNet, CANopen).



### PACKAGING

Weighing and packaging industry: the link between the two sectors is represented by the Pavone Sistemi products. For more than 30 years Pavone Sistemi's been representing - in Italy and Europe - NMB Minebea, a Japanese company worldwide leader in the production of off-center load cells ideal for packaging machines. Pavone Sistemi products are recommended in the implementation of applications on multi-head weighers, vertical packaging machines, packaging, etc.



### CHEMICAL-PHARMACEUTICAL

Our product offer finds a broad application in the Chemical and Pharmaceutical sector. Transmitters and weight indicators, load cells, weighing platforms, and much more can be used in harsh environments or in a modified atmosphere adapting to the needs of each installation. The applications are very varied: from the weighing of a reactor in the chemical industry to the development of a system for the microdosing of the powders in the pharmaceutical field.



### PAPER-TEXTILES

Pavone Sistemi thanks to its experience, dedication to research and development offers multiple solutions for the textile and paper industries. Scales, load cells, weight indicators and transmitters per PC/PLC, integrated into the process automation. Systems for mixing macro and micro components and systems for weighing and batching raw materials, systems for measuring and adjusting fabric tension on the roller. Reliability, durability and maximum quality and precision these are certainly the UPLIFT a Pavone Sistemi weighing system.



### FOOD

Over 50 years of activity Pavone Sistemi has become a supplier of the most important international manufacturers of machines and plants for the food industry. The implementation of systems for weighing silos and tanks is certainly one of our plus.



### UPLIFT

The magic word is custom! Weighing systems and load limitation applicable to overhead traveling cranes, aerial work platforms, cranes, hoists and lifts specially designed according to the specific needs of each client, here's what Pavone Sistemi can offer you. On each type of lifting system can be installed a Pavone Sistemi load limiters.



### PAINTS

From a historical point of view, paint industry (along with steel) is one of the most important sector for Pavone Sistemi. The first applications of weighing equipment made by Pavone Sistemi date back almost 40 years ago. Today the Pavone Sistemi production includes load cells, mounting hardware, weight transmitters for PC/PLC, weight and batching indicators and weighing systems specifically designed for maximum efficiency and performance in this area.



### PETROCHEMICAL

Pavone Sistemi offers innovative solutions for the petrochemical industry: load cells, platform scales, weight transmitters and weight indicators are designed to be integrated into any type of system and can interface with PLCs of the most renowned international brands through the main field bus on the market (Modbus RTU, Profibus DP, PROFINET, Ethernet, DeviceNet, CANopen).





# BRANDS

Over the years  
we have acquired  
the exclusive  
representation  
of some prestigious  
companies.

**BLH NOBEL**  
A VPG Brand

**VPG** PERFORMANCE THROUGH PRECISION

**Thames Side**

**TRANS•TEK**  
INCORPORATED

**SEG**

# CERTIFICATIONS



Through the years we have gained all available certification for guaranteeing you nothing but the best in products and services.

# CONTACTS

[www.pavonesistemi.it](http://www.pavonesistemi.it)

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