

# SERIES I4

EXCELLENCE AND ACCURACY IN SIGNAL CONVERSION



**FEMA**

# Experience and strength in Industrial Automation

The **I4 Series** is the result of FEMA's dedication to innovation and quality. Specifically designed for industrial use, the features and characteristics of this series draw from over 50 years of experience developing instrumentation for the industry.

With unparalleled versatility, the instruments of the **I4 Series** handle a wide range of signals, plus with their extensive configuration capabilities allows to adapt to all types of applications at all times.

## **MULTIFUNCTION:**

Versatile equipment for a multitude of signals.

## **FLEXIBILITY:**

Fully configurable input and output ranges.

## **FRONTAL KEYPAD:**

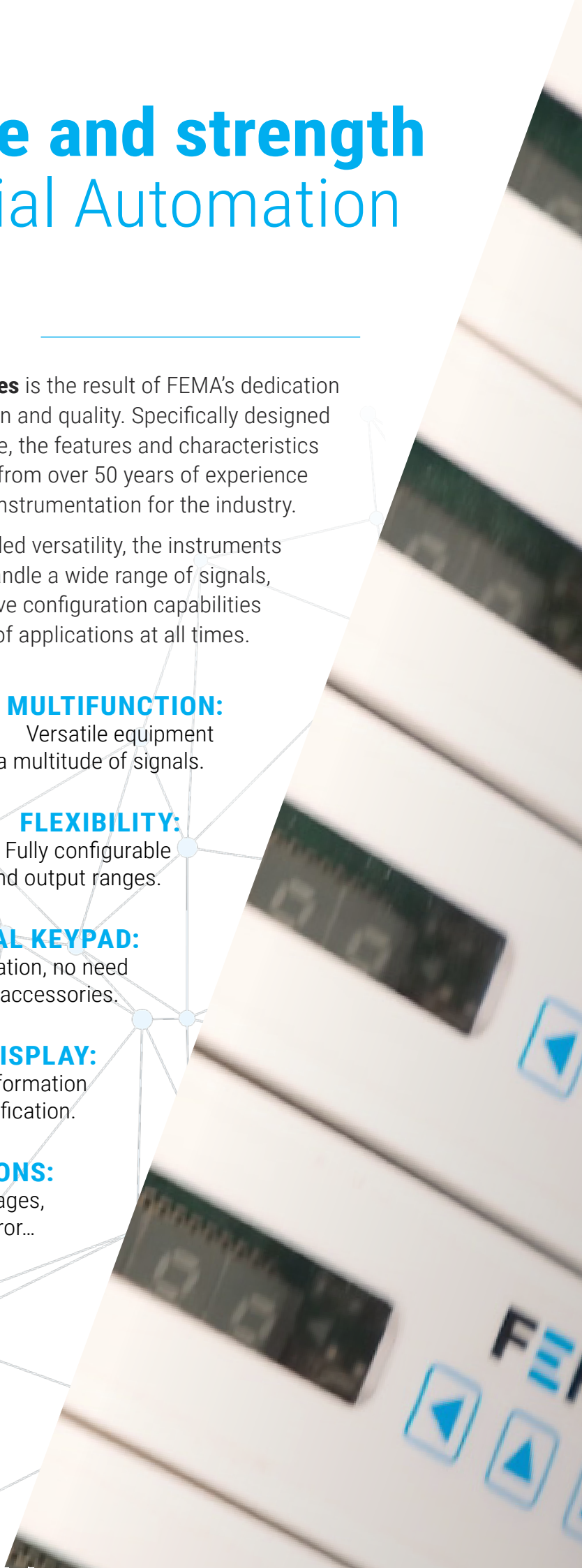
for direct configuration, no need for additional tools or accessories.

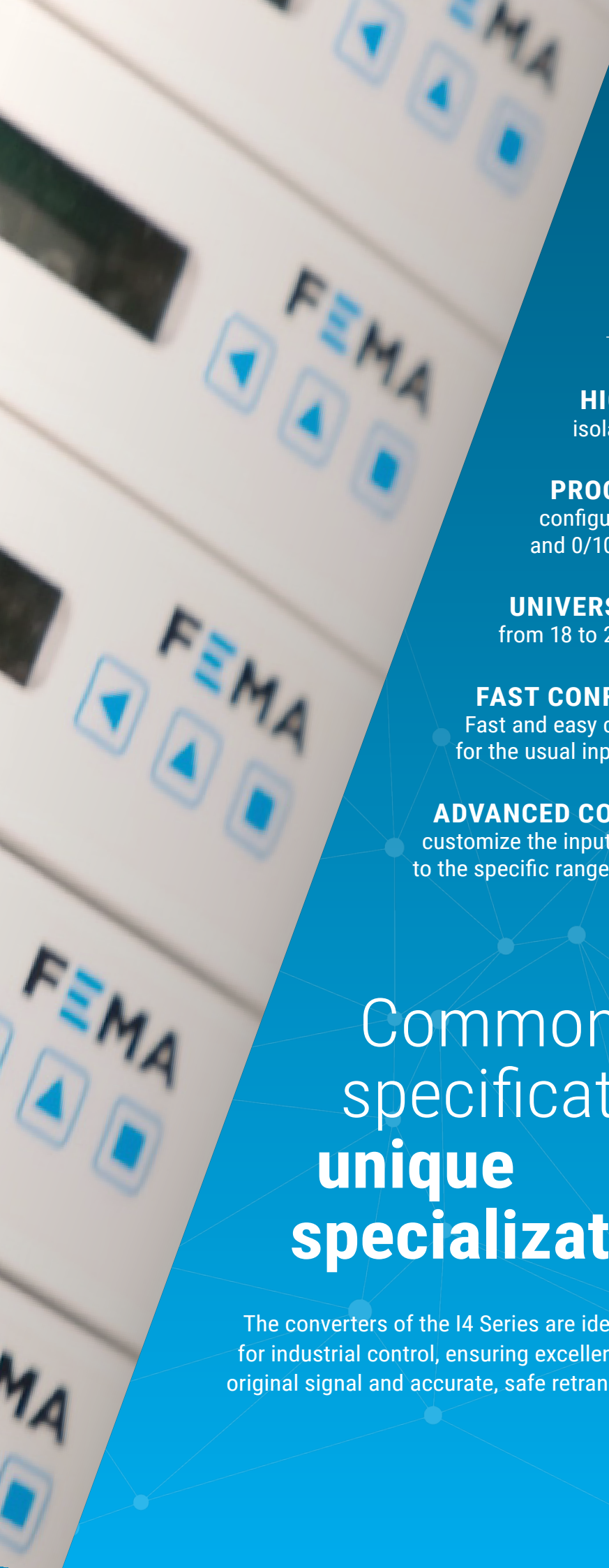
## **INTEGRATED DISPLAY:**

to configure, obtain information and real time verification.

## **INTEGRATED FUNCTIONS:**

SOS, Force, measure, messages, password, advanced scaling, on error...





The models of the **I4 SERIES**  
share unique features:

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**HIGH ISOLATION**  
isolated circuits 3000 Veff.

**PROCESS OUTPUTS:**  
configurable to 4/20mA  
and 0/10Vdc in the same instrument

**UNIVERSAL POWER SUPPLY**  
from 18 to 265 V ac/dc in the same instrument

**FAST CONFIGURATION BY CODES**  
Fast and easy configuration  
for the usual input and output ranges

**ADVANCED CONFIGURATION**  
customize the input and output scaling  
to the specific ranges of your application

# Common specifications, **unique specialization**

The converters of the I4 Series are ideal  
for industrial control, ensuring excellent acquisition of the  
original signal and accurate, safe retransmission to remote control elements.

# ADAPTABILITY AND ACCURACY

Only 4 models to cover a wide range of signals and sensors.  
Unique references to simplify your work.



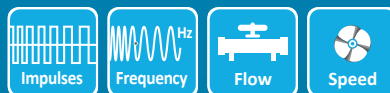
## I4P

For process, temperatures, resistances and potentiometers.



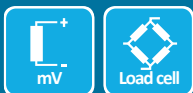
## I4E

For AC and DC electrical signals, up to 600V and 5A, and starting from mV and mA.



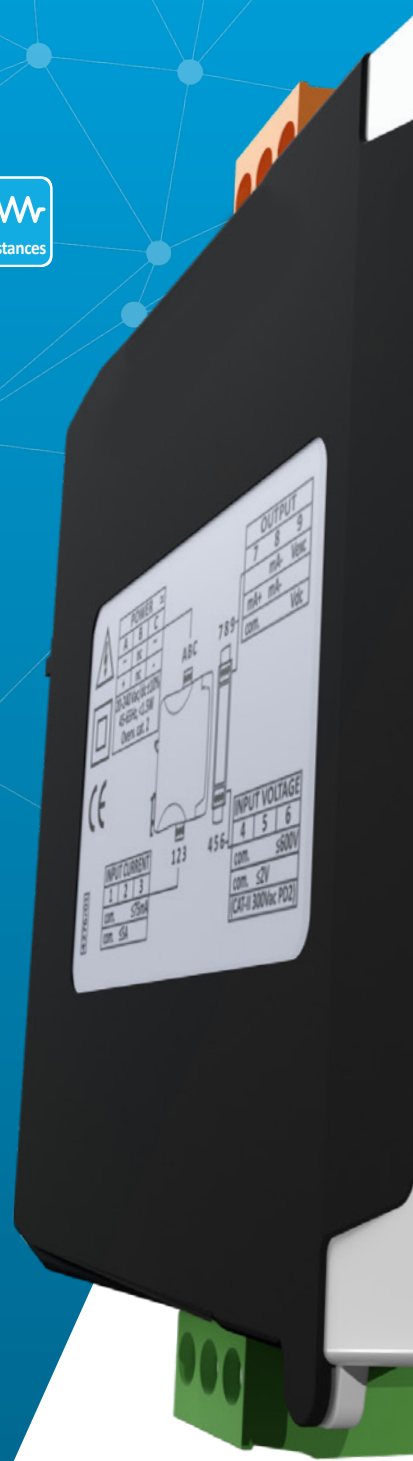
## I4F

For frequency signals coming from impulses, such as flow and speed.



## I4L

For load cells and millivolts.



# All advantages, zero complications

Simple, to simplify all phases of your project:  
design, procurement, installation, and maintenance ...

**So easy!**

## REDUCED TO THE MINIMUM 4 REFERENCES TO:

- Optimal stock management
- Minimum investment
- Optimal return of investment

## UNIVERSAL POWER SUPPLY FROM 18 TO 265 VAC/DC

- Real universal power supply
- Fits all power environments

## TOOLS FOR EASIER INSTALLATION AND ERROR IDENTIFICATION

- Signal output tests
- Access to measured values on display

## ADAPTABLE TO DIFFERENT SIGNALS IS FAST AND EASY

- Quick answers to unexpected problems

## EPLAN AND STEP FILES AVAILABLE

- For easy integration into projects



# Functions and tools that **make your job easier**

Integration, system check,  
maintenance, start-up, ...  
easier with the “advanced functions”.

## **FORCE**

Temporary forced output signal.  
Allows to perform remote system verification.

## **MESSAGES**

Access on display to actual input and output signal values.  
Without the need for a multimeter.

## **SOS**

Generation of a fixed output signal.  
Replace a faulty sensor without stopping the production line.

## **LABEL**

Identify each instrument with a “name”.  
Access the “name2 from the front display.

## **PASSWORD**

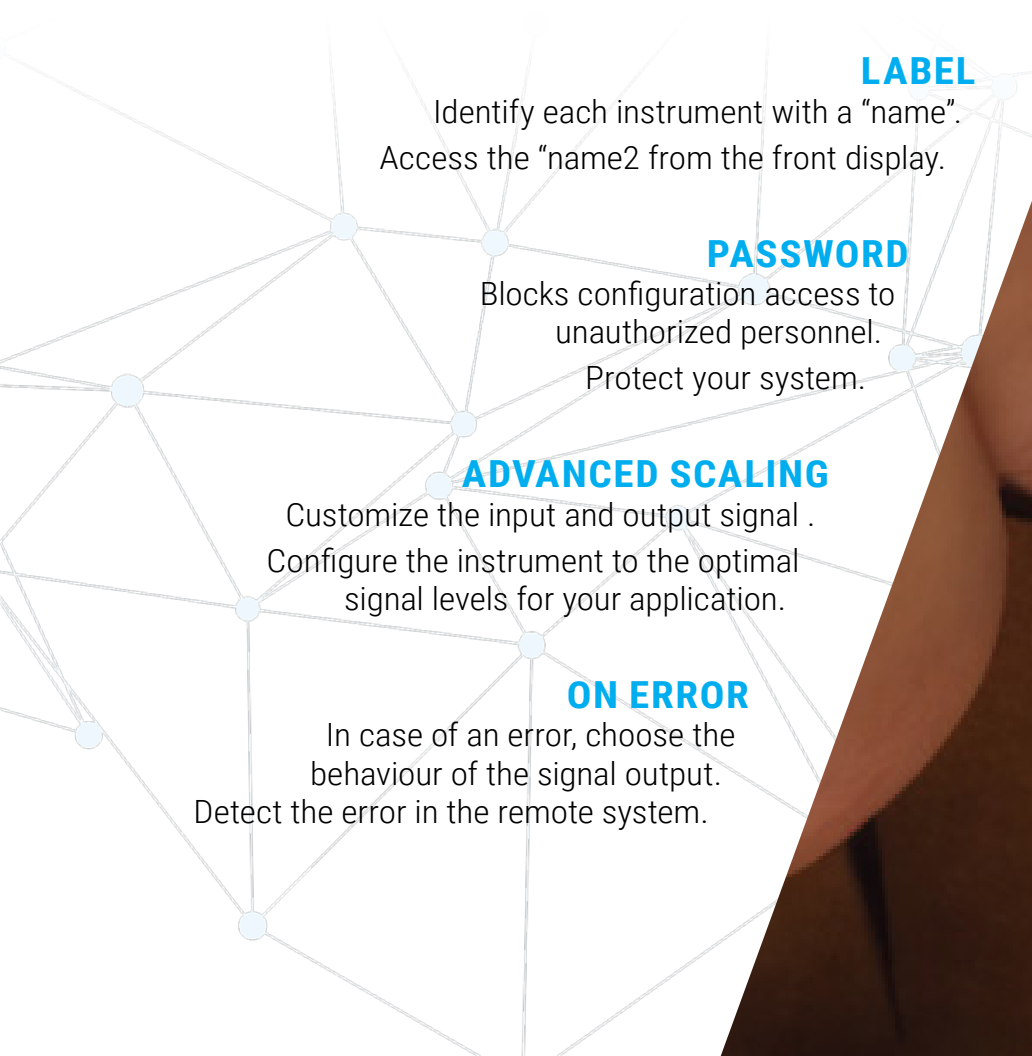
Blocks configuration access to  
unauthorized personnel.  
Protect your system.

## **ADVANCED SCALING**

Customize the input and output signal .  
Configure the instrument to the optimal  
signal levels for your application.

## **ON ERROR**

In case of an error, choose the  
behaviour of the signal output.  
Detect the error in the remote system.



# The **FEMA** offer of value

**FEMA** designs, manufactures, and exports industrial instrumentation. And for over 50 years.

Our proposal is to offer multifunctional equipment that is easy to configure, versatile, simple, robust, and reliable, and installable "*out of the box*" without the need for additional software or accessories.

The **I4 Series** is the result of our commitment and dedication to simplify the tasks of industrial professionals, as well as those of our international partners and collaborators worldwide.

**Choose the I4 Series:** the perfect combination of safety, versatility, accuracy and functionality for your industrial applications.





# SERIES I4

## Technical specifications

INPUT SIGNALS*	I4P	I4E	I4L	I4F
4/20 mA, 0/10 Vdc	✓			
Pt100, Pt500, Pt1000	✓			
Thermocouples J, K, N, E, T, R, S, C, B	✓			
Resistances	✓			
Potentiometers	✓			
NTC 44004 ... 44008	✓			
NTC 44030 ... 44034	✓			
NTC R25, Beta	✓			
Vac (ranges from 50 mVac up to 600 Vac)		✓		
Vdc (ranges from 50 mVdc up to 600 Vdc)		✓		
Aac (ranges from 5 mAac up to 5 Aac)		✓		
Adc (ranges from 5 mAdc up to 5 Adc)		✓		
Frequencies from power lines		✓		
Load cells (ranges from 5 mV up to 80 mV)			✓	
Load cells (ranges from ±5mV up to ±80 mV)			✓	
Millivolts DC (ranges from 5 mV up to 80 mV)			✓	
Millivolts DC (ranges from ±5mV up to ±80 mV)			✓	
Frequencies (ranges from 0/1 Hz up to 1MHz)				✓
Impulse signals NPN, PNP, Namur, pick-up, reed, ...				✓
Frequencies from AC signals up to 1 KHz				✓
Excitation voltage to power the transducer	✓		✓	✓
Universal power supply 18-265Vac/dc (isolated)	✓	✓	✓	✓
Output signals*	✓	✓	✓	✓
4/20 mA	✓	✓	✓	✓
0/10 Vdc	✓	✓	✓	✓
Isolation between circuits (3 ways)		3000 Veff		
* Intermediate ranges for input and output signals are customizable using the "advanced scaling" function				
Configurable "out of the box" **	✓	✓	✓	✓

\*\* Does not need any additional element (cables, software, ...)

More information:

