LOAD CELLS

Model	AQ	AG	AP	AXL - AXH	AK	F60X
Type			Single point			Bending
Rated load capacity (C.N.)	5 kg … 35 kg	1 kg … 100 kg	75 kg … 1.5 t	10 kg … 500 kg	6 kg … 300 kg	5 kg … 5 t
Accuracy class	C3 / C4	C3*	C3	C3	C3	C3*
Combined error (% C.N.)	0.017 / 0.013	0.017	0.017	0.017	0.017	0.017
Construction	Aluminum	Aluminum	Aluminum	Stainless steel	Stainless steel	Stainless steel
Protection	Coated, IP65	Coated, IP65	Coated, IP65	Sealed, IP69K	Sealed, IP68	Sealed, IP68
Maximum platform size (mm)	350 x 350	400 x 400	up to 1 000 x 1 000	up to 600 x 600	up to 600 x 600	-
Certifications	OIML, NTEP, IECEx	OIML, NTEP, ATEX, FM, IECEx	OIML, ATEX, FM, IECEx	OIML, ATEX, IECEx	OIML, NTEP, ATEX, FM, IECEx	OIML, ATEX, FM, IECEx

ELECTRONICS
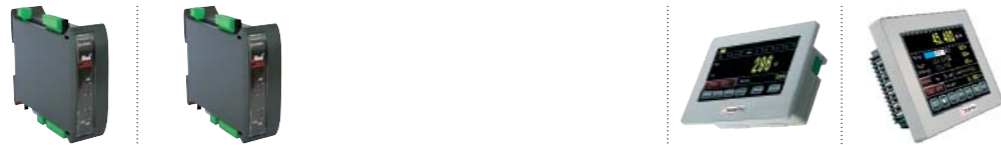
● : Standard · O : Optional

Model	eNod4-B STD	eNod4-B IO+
Type	Controller / Transmitter	
Capacity (C.N.)	1 channel	
Lay out	Din Rail	
Accuracy class	0.05 %	
Certification	-	
Internal resolution	24 bits	
Formated resolution	± 500 000 pts	
Conversion speed	400 meas./s.	
Interfaces		
Inputs / Outputs	2 I / 4 O	4 I / 4 O
Analog output	-	●
Industrial networks		
Modbus-RTU		●
Modbus-TCP		O
CANopen®		●
Profibus-DP		O
Profinet		O
EtherNet/IP		O
EtherCAT		O

Model	eNodTouch-M	eNodTouch-ML
Type	IHM	
Capacity (C.N.)	Multi-channel, 1 … 6 eNod4	
Lay out	Color touchscreen	
Display	LCD TFT 4.3"	LCD TFT 5.7"
Screen	color 480 x 272	color 320 x 240
Communication	RS485, Modbus-RTU	

eNod4 for your processes safety:

Reliability and safety are essential factors to be taken into account for the control of industrial processes.

In order to ensure this functional safety, eNod4 integrates **a diagnosis of the measuring chain.** This diagnosis simulates a load by shunt resistor and can be triggered at any time by the PLC.

scaime

Belt Weighing
Belt scales, Weigh belt feeders

Flow rate control and totalization on conveyor belt…

SCAIME offers high accuracy load cells and versatile controllers for belt scales and weigh belt feeders. Easy to integrate into automated systems, these solutions include comprehensive continuous totalization and flow rate control.

Speed sensor

eNodTouch-M touchscreen:

Multi-channel HMI for configuration and monitoring of 1 to 6 eNod4, eNodTouch-M runs in parallel of the PLC connection or allows to use eNod4 without PLC.

Load

Speed encoder

Analog output

PLC

PID control

CANopen Modbus EtherNet/IP PROFIBUS PROFINET EtherCAT

AG

F60X
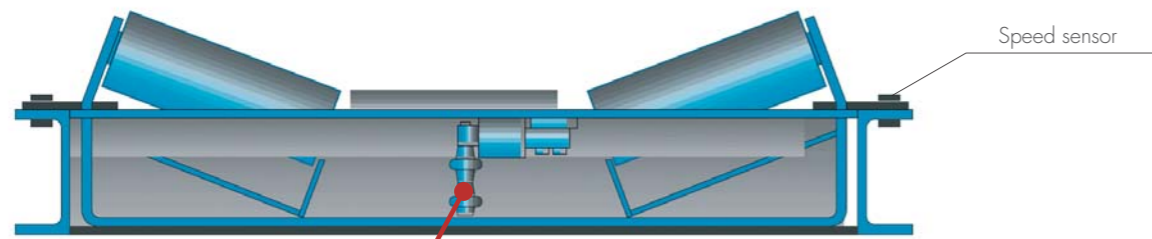
LOAD CELLS:

SCAIME offers a comprehensive range of load cells for the design of your belt scale:

- Single point or bending beam load cells
- Capacity from 1 to 5 000 kg
- Aluminum or stainless
- Many fixing possibilities

SOFTWARE:

eNodView software allows configuration and calibration of all products of the eNod range. It is as well a powerful acquisition and signal analysis software for:

- Time and frequency graphic display of the signal
- Simulation and set-up of digital filters
- Graphic display of flow rate and PID control output

These functionalities make eNodView an essential tool for the analysis of mechanical disturbances, filtering optimization and set-up of PID regulation parameters.
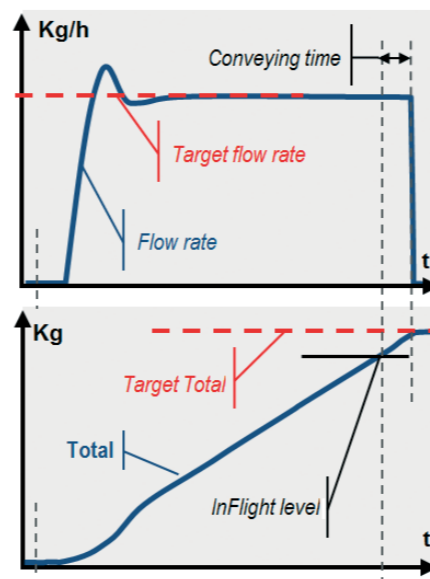
ELECTRONICS:

SCAIME has developed eNod4-B, a powerful and scalable weighing controller, fitted with an application for belt scales. Designed for an easy integration into automated systems, eNod4-B can also be used without PLC with the optional eNodTouch-M HMI.

eNod4-B offers advanced interfaces and functionnalities to build a continuous belt weighing or feeding system:

- 1 input for the belt speed sensor
- 4 logic inputs and 4 outputs for dosing process control and pulse signal for remote totalizer
- Several levels of digital filtering to eliminate vibrations
- 1 adjustable analogue output

Kg/h

Conveying time

Target flow rate

Flow rate

t

Kg

Target Total

Total

InFlight level

t

Continuous totalizer functions:

- Belt speed calculation and weight integration by length unit.
- Flow rate calculation and totalization of product quantity over the belt.
- Management of a dosing cycle with totalized weight target.
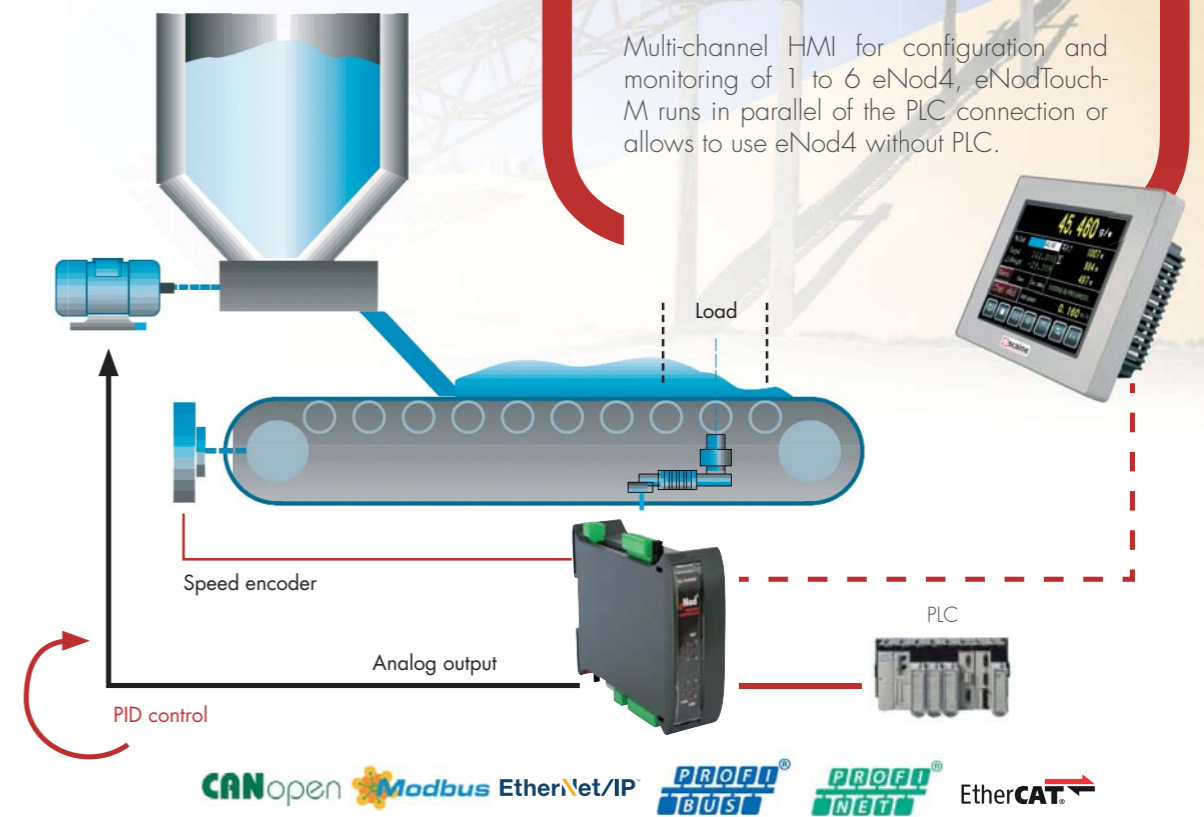
Weigh belt feeder functions:

- Flow rate control according to pre-set target, by PID adjustment.
- Automatic adjustement of PID parameters by self-learning technology.

Designed to communicate:

eNod controllers range offer a full access to process data or configuration data through the industrial network: CANopen, Modbus-RTU, Profibus-DP, Modbus-TCP, EtherNet/IP, Profinet or EtherCAT.