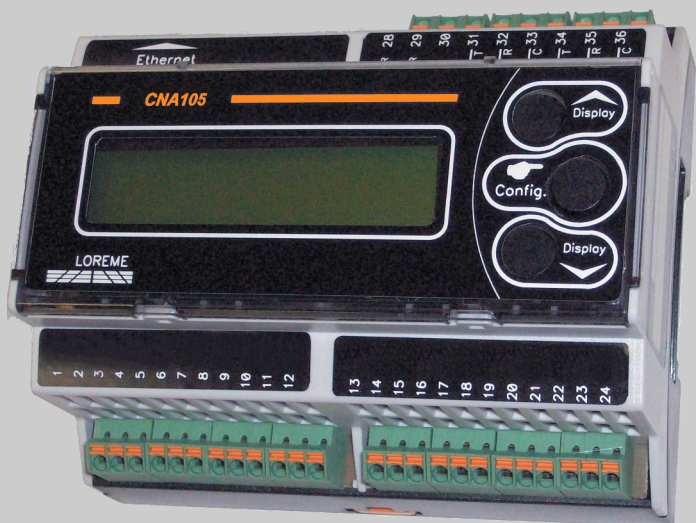


Binary Gray BCD to 4-20mA or 0-10V converter for parallel outputs encoders

TYPE: CNA105



- **18 parallel digital inputs**
(16bits + sign + lock)
BCD, Gray, Binary input formats
- **Analog output**
0...4...20mA, 0...10Volts, 16 bits resolutions
- **Optional relay output (CNA105/R)**
2 programmable thresholds
- **Application :**
Interface for parallel outputs encoders



The CNA105 is a converter for parallel outputs encoders. It converts the encoder's position into an analogical signal output. The display allows a quick diagnosis on the proper operation. The CNA105 may be used in many application through its user programmable configuration (encoder resolution, code format type: BCD, gray, binary, polarity, sign, ...).

The output relay provide a local management of block stop or alarms.

Description :

Parallel digital inputs:

- 16 digital inputs
 - 1 digital input for sign (facultative)
 - 1 « LOCK » input (facultative)
- Digital input can be for voltage level or dry contact
(polarization voltage of 22v available)
Type of input code configurable: BCD , GRAY , Binary
Resolution : from 1 to 16 bits signed or not.

Front face :

2 lines of 16 characters LCD backlit display
Viewing of inputs state, type of decoding, analog output value, state of relay,
The display of input code may be in decimal format or in another user display range (correction factor). Changed view with "display" button.
The display allows to have a origin shift (tare)

Configuration:

Three push buttons are used for the configuration.
Two configuration mode available (user or installer).

Analog output :

The analog output is the encoder position feedback into an isolated current or voltage form (0...4...20 mA or 0..1...5....10V).

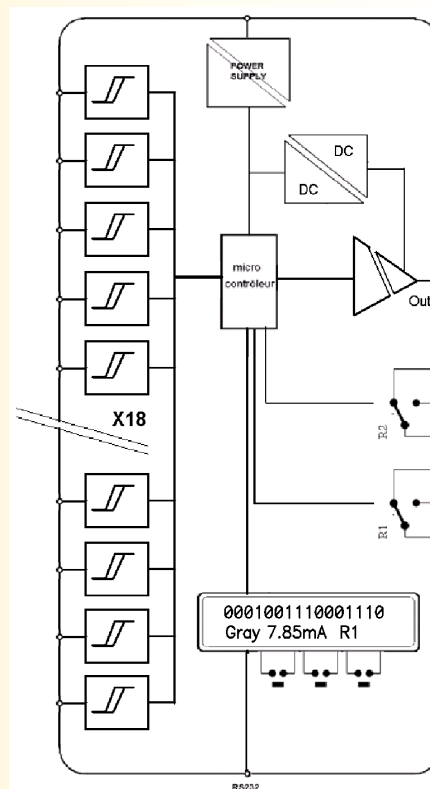
Relays :

The device can have 2 thresholds with /R option. (configurable thresholds, sens, hysteresis, delay)
Each alarms drive a relays when the preset threshold is exceeded.
The relay may be configured in positive or negative security mode (Normally Open / Normally Close)

Features:

- rail DIN mounting,
- Connection on spring terminal 1.5 mm²,
- conformal coating.
- protection rating (enclosure / connectors) : IP20
- optional mounting in IP65 box

Synoptic:



Version and order code:

[Request a quote](#)

CNA105 : 18 digital inputs (16bits + sign + lock)
and analog output

OPTION :

CNA105/R1 : + 1 relay
CNA105/R2 : + 2 relay

User handbook ->



E 1

DIGITAL INPUT

Logical state	Min	Max
Level 0	0 V	1 V
Level 1	10 V	150 V
Input impedance :	100 kOhms	
Voltage polarisation :	22Vdc (for dry contact) (All inputs are with common ground)	
Measure rate :	70 per second	

OUTPUT (analog, 16bits resolution)

Type	Range	Accuracy
Current	0 ... 4 ... 20 mA	+/- 5 µA
Maximum load:	850 Ohms	
Voltage	0 ... 10 V	+/- 10 mV
Output impedance:	500 Ohms (internal 0.1% shunt)	

Response time programmable from 20 ms to 60 s

Relay

Switching capacity: 250Vac / 10A (200 Vdc / 0.6A)

POWER SUPPLY (to define at order)

20 to 265 Vac-dc, 3 VA
11 to 30 dc, 3 VA

ENVIRONMENT

Operating temperature	-20 to 60 °C
Storage temperature	-25 to 85 °C
Influence	< 0.01 % / °C
Humidity	85 % not condensing
Weigh	250 g
Protection rating	IP 20
Dielectric strength :	
Input/supply/relays/output :	1500 Veff continuous
No isolation between inputs. Common ground	
MTBF (MIL HDBK 217F)	> 3 000 000 Hrs @ 25°C
Life time	> 170 000 Hrs @ 30°C

Electromagnetic compatibility 2014/30/UE / Low Voltage Directive 2014/35/UE

Immunity standard for industrial environments EN 61000-6-2		Emission standard for industrial environments EN 61000-6-4
EN 61000-4-2 ESD	EN 61000-4-8 AC MF	EN 55011 group 1 class A
EN 61000-4-3 RF	EN 61000-4-9 pulse MF	
EN 61000-4-4 EFT	EN 61000-4-11 AC dips	
EN 61000-4-5 CWG	EN 61000-4-12 ring wave	
EN 61000-4-6 RF	EN 61000-4-29 DC dips	



WIRING AND OUTLINE DIMENSIONS:

