

• Synchronous Serial interface input

Master or slave mode

8 to 25bits SSi frame in binary or gray format
can provide supply for encoder

• Parallels outputs

25bits + DATA Valid output
GRAY or BIN format

• option Ethernet modbus tcp link



The CSSIP105 is a serial to parallel converter for a SSi encoder. The CSSIP105 retransmits on its parallel outputs (binary or gray format) the encoder value read by the SSi communication. The LCD display allows fast diagnosis of the properly functioning (input value display, physical ranges, outputs state).

DESCRIPTION:

Input :

SSi master or slave operation,
for SSi single-turn and multi-turn encoders from 8 up to 32bits,
SSi clock from 100KHz to 1MHz,
Programmable low and high range, length of SSi frame,...
Auxiliary output 24Vdc/100mA for SSi encoders supply.

Software functions:

Multiply/divide factor, adjustment of zero value,
Code sense (direction), minus sign, offset (tare function),
Freeze mode (Hold function)

Calculations:

Special linearization on 26 points.

Parallel logic outputs:

- 25 binaries outputs.

The outputs are made with static relays with bi-directional output. The logical operating mode is user configurable (normally open or normally closed). The output are electrically isolated from input and power supply. At the power on, the device need a 500ms delay before the proper updating of outputs. The breaking capacity of outputs is 400V, 100mA. (external polarisation voltage)

Format and resolution are user configurable. The refresh rate is about 100 measures/seconds

- 1 «ready» output signal the stability of outputs between two consecutive conversions.

- 1 «watchdog» output signal the good functioning of device.

Front face:

LCD display. 2 lines, 16 characters (blacklit display).

Display the measure in human readable unit and the output status.

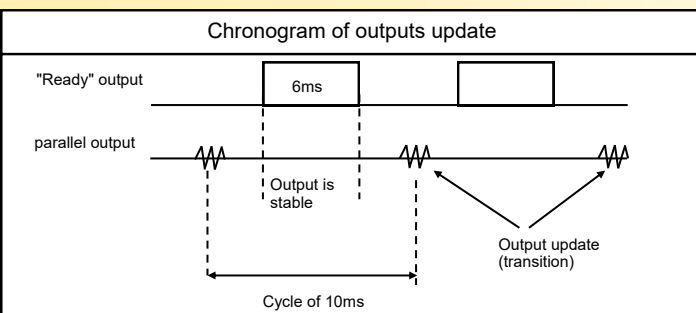
Configuration:

The device may be configured with the front face buttons or via the RS232 link (USB cable order separately)

- possible firmware update with the USB-RS232 link

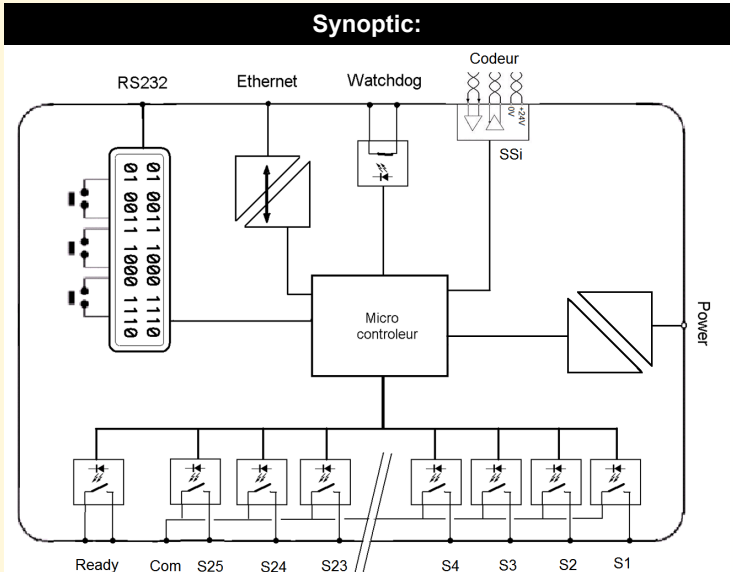
Realization:

- DIN rail mounting,
- conformal coating,
- connection on spring terminals (max section 1.5 mm ²),
- protection : IP20,
- IP65 mounting in option.



Communication (option):

- Ethernet 10/100 base T link (RJ45 plug)
- Modbus TCP protocol on port 502
- Functions: Read of status and measures.



Version and order code:

CSSIP105 : SSi input, parallel outputs.

Communication (option)

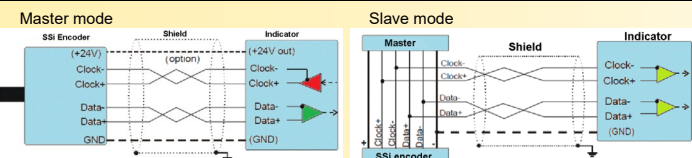
CSSIP105/CMTCP : + Ethernet MODBUS TCP link.

SSi INPUT

SSi input type: Differential RS 422 / RS485
 Programmable SSi clock: 100KHz, 250KHz, 500KHz, 1MHz
 Master mode or Slave mode.
 Common mode protection : +/-70V
 ESD protection : +/-16Kv
 Refresh rate : 100 mesures / seconde.

AUXILIARY

Encoder supply 22 V regulated +/- 5% (100mA)



PARALLEL OUTPUTS (25bits + «ready»)

Solid state relays technology (MOS FET)
 Maximal voltage breaking: 400V not polarized
 (AC or DC commutation)
 Maximal current breaking: 100mA
 Open state leakage current: <1µA
 Closed resistance: < 25Ohms
 Close delay: <1ms
 Open delay: <0.5ms

(All outputs are with common point.)

POWER SUPPLY (to be define at order)

20V ... 265Vac-dc, 11V 30Vdc : 5 VA

ENVIRONMENT

Operating temperature -20 to +60 °C
 Storage temperature -20 to +85 °C
 Relative humidity 85 % not condensed
 Weight ~ 250 g
 Protection IP20
 Dielectric strength (input/power/output) 1500 Vrms continuous

COMMUNICATION

Ethernet (RJ45) 10/100 Base T
 MODBUS TCP protocol Port 502
 reading rate 25 request/second max.

LOGICAL INPUTS

Reset (tare) / Hold input : dry contact or voltage
 Low level : 0 ... 4 Vdc
 High level : 5 ... 35Vdc
 reset pulse duration mini: 20 ms

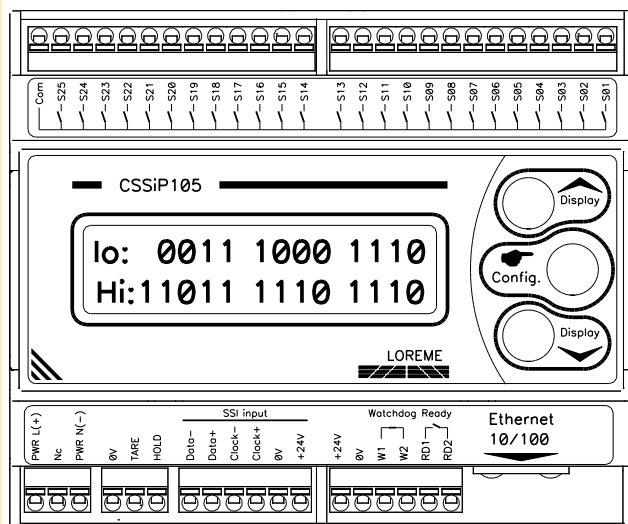
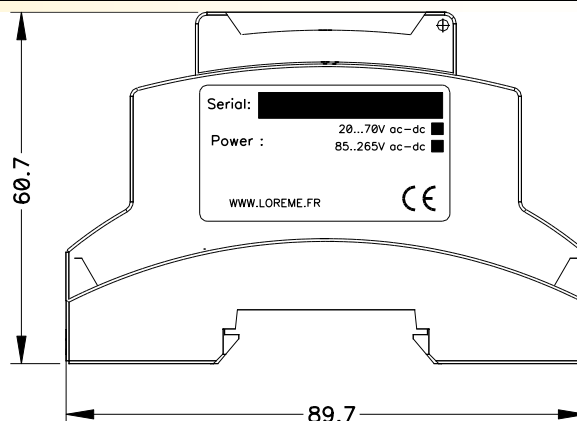
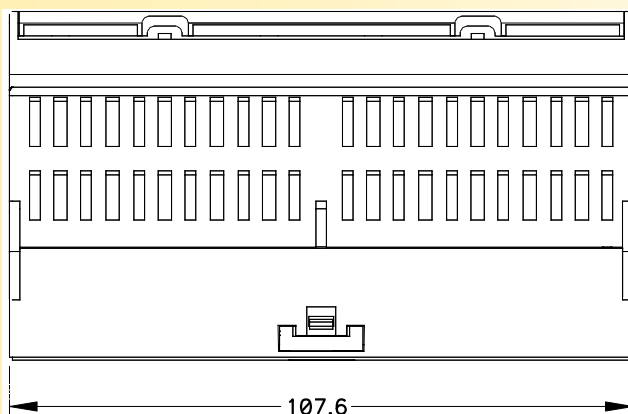
Electromagnetic compatibility

Generic standards: NFEN50081-2 /NFEN50082-2



EN55011	meet	groupe 1 / classe A
EN61000-4-2	no influence	B EN61000-4-3 < +/- 5 % A
EN61000-4-4	< +/- 5 %	B EN61000-4-6 < +/- 10 % A
EN61000-4-5	< +/- 5 %	B
EN61000-4-8	no influence	A
EN61000-4-11	< +/- 5 %	B DBT 2006/95/CE

WIRING AND OUTLINE DIMENSIONS:



OPTION: IP65 BOX

height:200mm, width (external):159mm, depth:112mm,
 colour: Light Grey, protection:IP65, material: Polystyrol.