

• **Synchronous Serial interface input**

Master or slave mode
8 to 32bits SSi frame in binary or gray format
Encoder powered by indicator



• **Display**

6 digits for value, 4 digits for unit
Easy programming with explicit text message

• **option :**

Up to 3 relays
Isolated analogue output
RS485 Modbus/Profibus link
ETHERNET Modbus TCP or Profinet io link



• **Plug-in connectors**

• **Universal supply (Ac and Dc)**

The INL35ssi is a position indicator for SSi absolute encoder. It has a wide range of interfaces, from simple relay or analogue output to Ethernet communication.

DESCRIPTION:

The SSi interface consist of 2 pairs of wires:
One for transmitting the clock signal from a master and the other for transmitting the data from the slave (encoder).
The number of clock pulse depend of the number of bit in the ssi frame.
A third pair of wires can provide the power supply for the encoder.

Input :

SSi master or slave operation with baud rates up to 1MHz,
for SSi single-turn and multi-turn encoders from 8 up to 32bits.
Programmable low and high display value
Programmable lenght of ssi frame, bit blanking,...
Auxiliary output 24Vdc/100mA for supply of SSi encoders
3 programmable logical inputs (Hold, Tare,)

Calculations and software functions:

Multiply/divide factor, adjustment of zero value
Code sense, minus sign, offset (Tare function),
Freeze display (Hold function)
Special linearization on 26 points

Front face :

- Value display: 6 digits, 7 segments LED, 14,2 mm high
- Unit display: 4 digits, alphanumerical LED display
- 3 push buttons for the complete device configuration
- 4 red led for relays state and Tare function.

Analogical output (/S option)

- isolated analogical output suitable,
- programmable in current (0... 4... 20 mA) or voltage (0... 1... 5... 10 V) mode
- programmable response time and security value.

Relays (/R option)

- Up to 3 relays with dry changeover contacts, use in alarm or ssi link breaking.
- Threshold, sense, hysteresis and delay freely programmable for each relays

General characteristics:

- standard housing 96x48mm
- Protection class: IP20, IP65 in option
- Unpluggable 1.5mm² screw connector
- Universal power supply:
20... to ... 265Vac/dc or 9Vdc... to ... 30Vdc
- Tropicalization varnish.

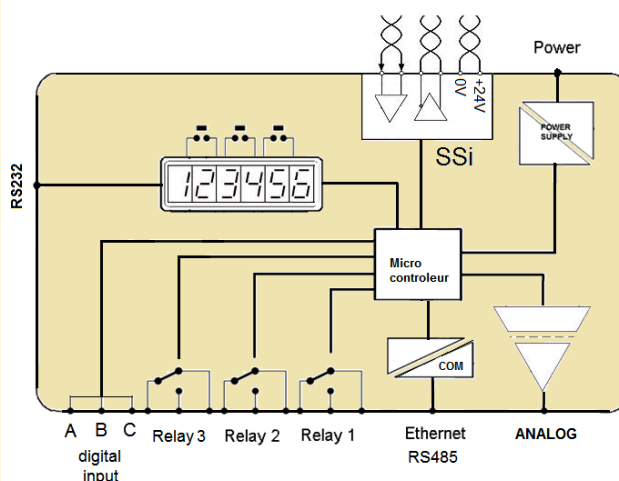
Security / reliability :

- configuration settings saved in FLASH, data retention > 40 years,
- a "Watchdog" controls the good running of programme
- galvanic isolation input / outputs / supply

Configuration:

The device may be configured with the front face buttons or by a RS232 serial link (terminal mode). A USB—jack 3.5 cable is available separately.
- Firmware update possible by USB link.

Synoptique:



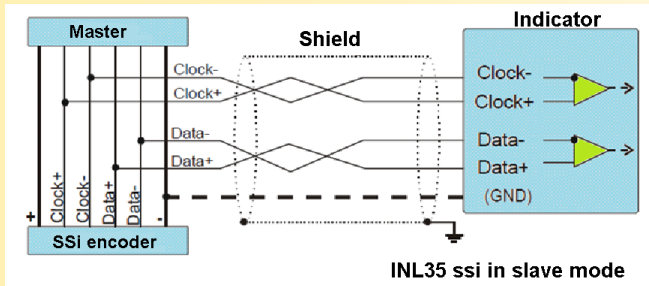
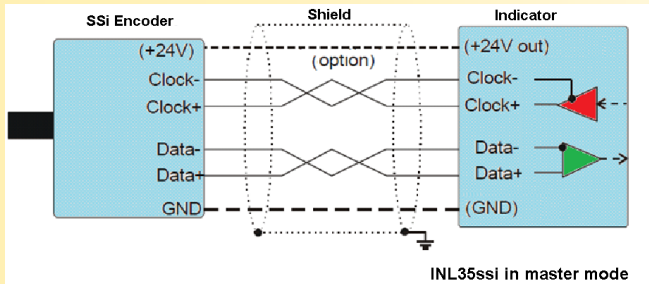
Version and order code:

INL35ssi	basic version, 6 digits display
INL35ssi/R1	+ 1 relay
INL35ssi/R2	+ 2 relays
INL35ssi/R3	+ 3 relays
INL35ssi/S	+ 1 analogical output
INL35ssi/C	+ RS485 link MODBUS/PROFIBUS
INL35ssi/CMTCP	+ ETHERNET MODBUS TCP link
INL35ssi/CPTCP	+ ETHERNET PROFINET IO link

options /R3 , /S , /C , /CMTCP et CPTCP are not combinable

SSI INPUT

SSI input type Differential RS 422 / RS485
Programmable SSI clock baud rate
Clock baud rates 100 KHz ... 1 MHz
Master mode : Output differential RS 422 / RS485
Slave mode : Differential Input RS 422 / RS485
 Common mode protection : +/-70V
 ESD protection : +/-16Kv
 Refresh rate : 100 measures / seconde.



AUXILIARY

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

LOGICAL INPUTS

Reset / Hold input : dry contact or voltage
 Low level : 0...2 Vdc
 High level : 4...35Vdc
 pulse duration mini: 20 mS

POWER SUPPLY

2 versions available : not polarized, standard and low voltage:
 standard : 21Vdc,55Vac...to...265Vac/dc
 Low voltage : 12Vdc...to...30Vdc.
 consumption < 6 VA

Type	Analogical output Range	(12 bits resolution) Accuracy
Current	0 ... 4 ... 20 mA	+/- 20 µA
Load:	0.....800 Ohms	

Voltage 0 ... 10 V +/- 10 mV
 Output impedance: 500 Ohms (internal 0.1% shunt)
 Response time (programmable) from 10 ms to 60 sec

RELAY

Breaking capacity: 250VAC , 1A (250 VA)

COMMUNICATION

RS485 link, 2 protocols:
 Modbus 1,2 to 38,4 kbps.
 Profibus-DP 9600 to 1.5M bds.
 Wiring 2 wires screw terminal.

Ethernet (RJ45) 10/100 M with Modbus-TCP or Profinet io

ENVIRONMENTAL DATA

Operating temperature -10 to +60 °C
 Storage temperature -20 to +85 °C
 Drift < 50 PPM / °C
 Relative humidity 85 % (no condensed)
 Weight ~ 180 g
 Protection IP20
 Dielectric strength 1500 Vrms continuous

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:

