LC11

1 channel Analog Input/ 1 channel Digital I/O PL20 Transceiver

1. Description

The LC11 transceiver provides 1 analog (4-20mA) input channel, as well as 1 digital I/O channel. Power and communications are distributed on the same wires using the Lonworks PL20 power line communication protocol.

2. Input Channels

The single analog input is suitable for 3-wire 4-20mA wiring as well as 2-wire 4-20mA wiring. The signal input is protected with a resettable fuse, and the transceiver can deliver up to 100mA to power an external sensor.

By default, the shorting jumper links terminal ***So*** to 0V. Should the user require the signal to be available to another external device, the shorting jumper must be removed.

The single digital input is isolated using opto-isolator components. To activate the input, the two terminals of the input must be linked (short circuited). This type of input is ideal for monitoring a voltage free contact.

3. Output Channels

The single digital output is of the open drain type. The output provides up to 150mA at the available line voltage level. The line voltage is nominal 24VDC, but can be any voltage between 18VDC to 30VDC.

Activating the output causes the ***SW*** terminal of the output to be connected to 0V via an on-board MOSFET transistor. The output circuit is protected by a resettable fuse. This type of output can be used to control external relays, audio/ visual alarms, etc.

4. Lonworks Template Detail

Channel	Type	Network Variable	Signal -> Value		Signal -> Value	
CH1	4-20mA Input	nvoSENSOR0	4mA	655	20mA	3276

Channel	Type	Network Variable	Signal -> Value		Signal -> Value	
I/O1	Digital Input	nvoDIn0	OPEN	ST_OFF	CLOSED	ST_ON

Channel	Type	Network Variable	Value -> Output		Value -> Output	
I/O1	Digital Output	nviDOut0	ST_OFF	Floating	ST_ON	Pulled low

Line Voltage	Voltage input	nvoLV	LV = nvoLV x (30/4095)

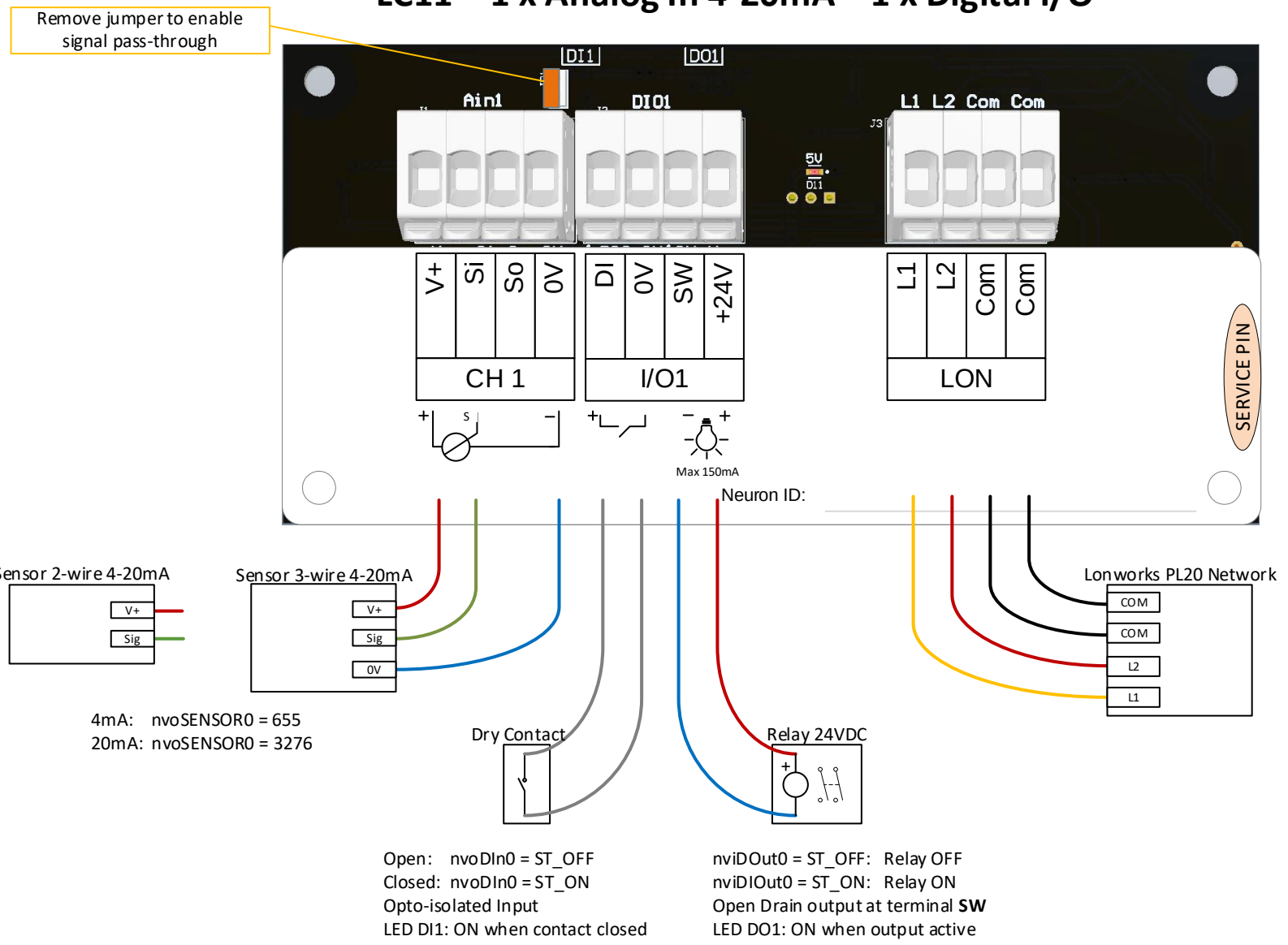
5. Power Requirements

- Supply Voltage: 18 to 30VDC
- Current consumption: 12mA @ 24VDC, no external loads

6. Environmental Specifications

- Ingress protection: IP65
- Operating temperature: -10 to 55°C

LC11 – 1 x Analog In 4-20mA 1 x Digital I/O



Open: nvoDIn0 = ST_OFF
Closed: nvoDIn0 = ST_ON
Opto-isolated Input
LED DI1: ON when contact closed

nviDOut0 = ST_OFF: Relay OFF
nviDIOut0 = ST_ON: Relay ON
Open Drain output at terminal **SW**
LED DO1: ON when output active