

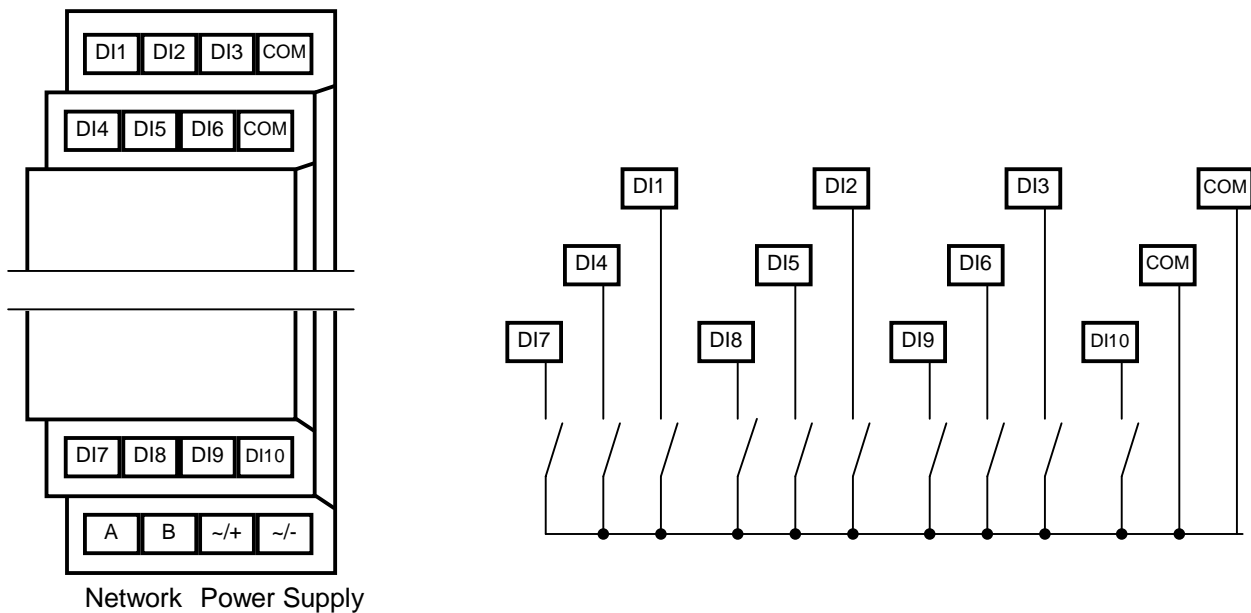
AM2500-0606

Module with 10 Digital Inputs**1 Technical Description**

The AM2500-0606 module is an input device for processing binary signals in LonWorks® technology based control systems.

It contains ten digital inputs for potential free contacts. The state of each input is presented by LEDs located on the front of the unit along with the service LED, service pushbutton and power LED.

The AM2500-0606 is delivered with the standard application software described below. Should you require modifications of the software or a custom application please contact CompWell.

2 Functional Diagram

3.1 Technical Data

Transceiver	FTT-10A
Neuron® Chip	3120®/10MHz
Power supply	24V AC/DC (12..32 V DC 12..26 V AC)
Power supply current	Max. 120 mA
Operating temperature range	0..50 °C
Storage temperature range	-20..+70 °C
Relative humidity	0..75 % annual average (non-condensing)
Environmental protection	IP20
Compliance	CE, LonMark Compatible
Installation	35 mm DIN rail mounting

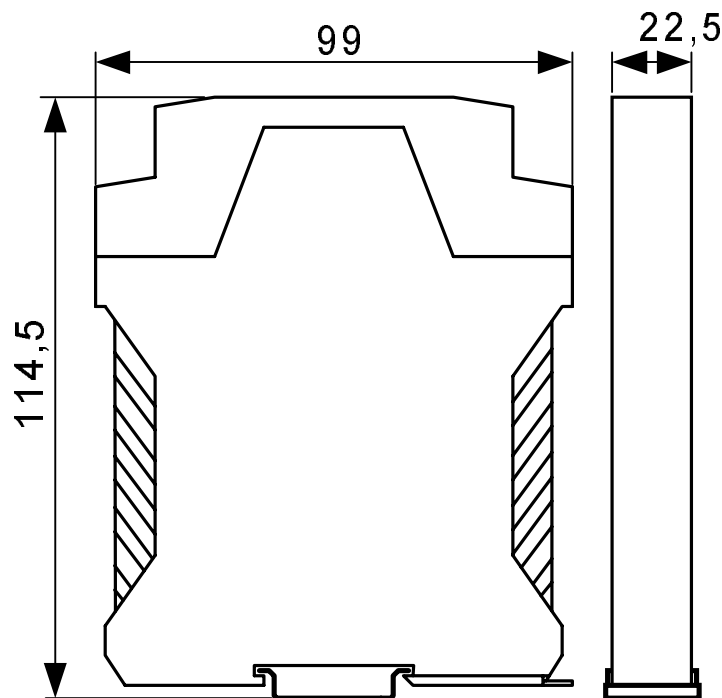
3.2 Digital Inputs

Inputs	10 digital inputs
Nominal voltage	24 V DC
Max. Input voltage	33 V
Input impedance	10 kΩ
Low level input	< 3 V
High level input	> 5 V

3.3 Terminal type

Type	Detachable screw terminals
Cable type	Max. 2,5 mm ²

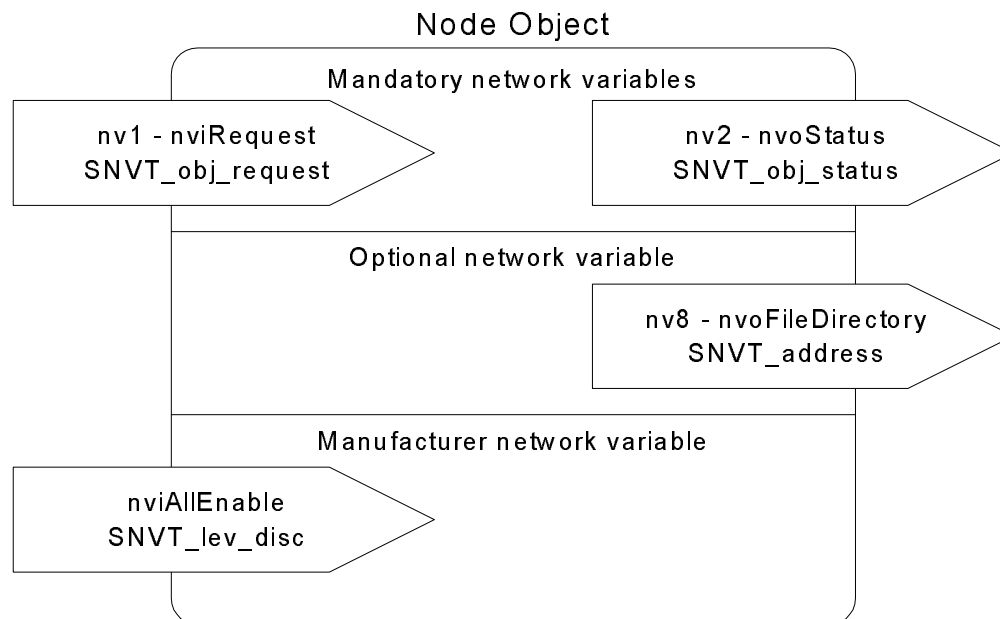
4 Dimensions



5 LonMark[®] objects

5.1 Node Object (object #0)

5.1.1. Diagram



5.1.2 Functions

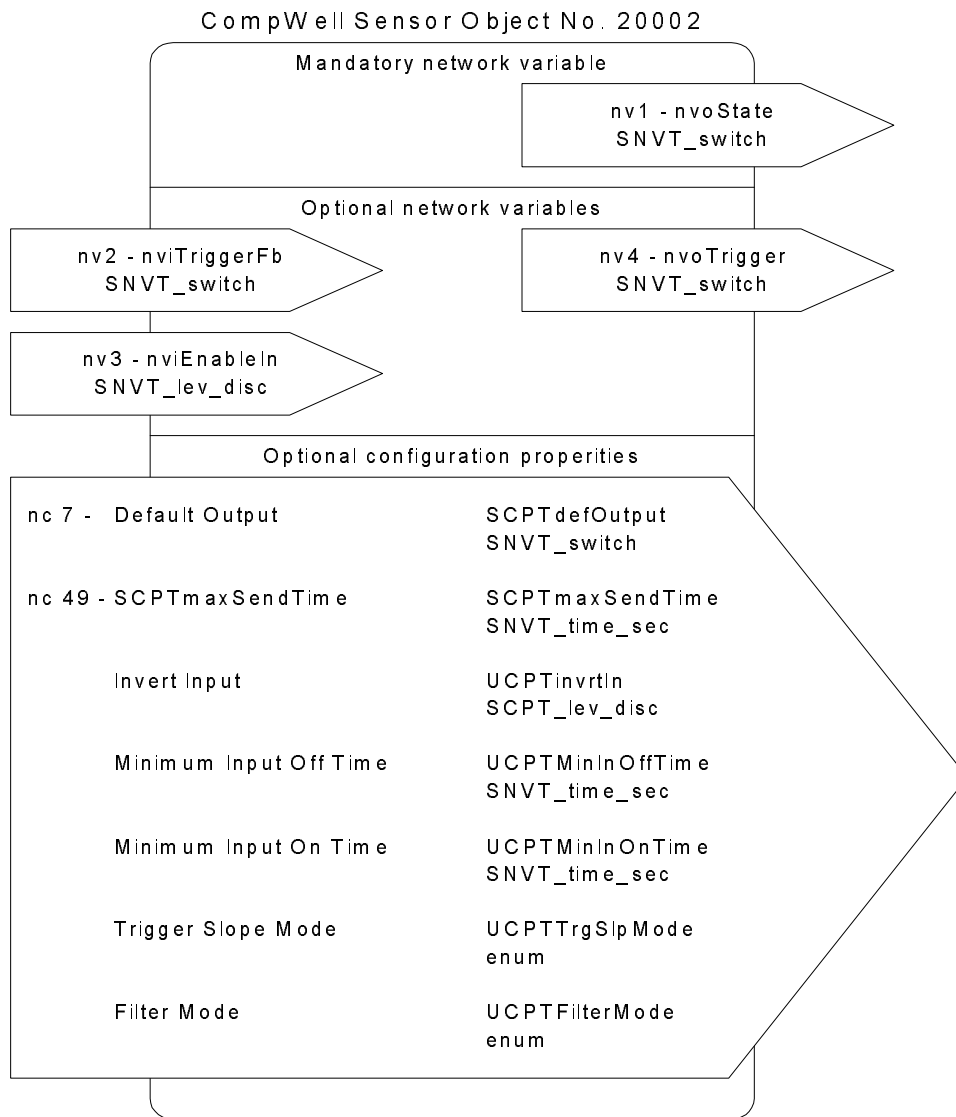
The Node Object is the mandatory LonMark object with direct memory read/write. The Node Object also contains one network variable that controls all inputs.

5.1.3 Network variables

Name	Type	Description
nviRequest	SNVT_obj_request	Mandatory network variable for managing purposes.
nvoStatus	SNVT_obj_status	Mandatory network variable for managing purposes.
nvoFileDirectory	SNVT_addres	Optional network variable for managing purposes.
nviAllEnable	SNVT_lev_disc	Enables (ST_ON) or disables (ST_OFF) all digital inputs.

5.2 Universal Input Object (object #1 to #10)

5.2.2 Diagram



5.2.3 Functions

The Universal Input Object represents the digital input hardware of the device. The "10DI" deploys ten identical Universal Input Objects.

5.2.4 Network variables

Name	Type	Description
nvoState	SNVT_switch	Output variable represents momentary digital input.
nviTriggerFb	SNVT_switch	Trigger feedback input variable.
nviEnableIn	SNVT_lev_disc	Enables (ST_ON) or disables (ST_OFF) a digital input.
nvoTrigger	SNVT_switch	Output variable that represents triggered digital input.

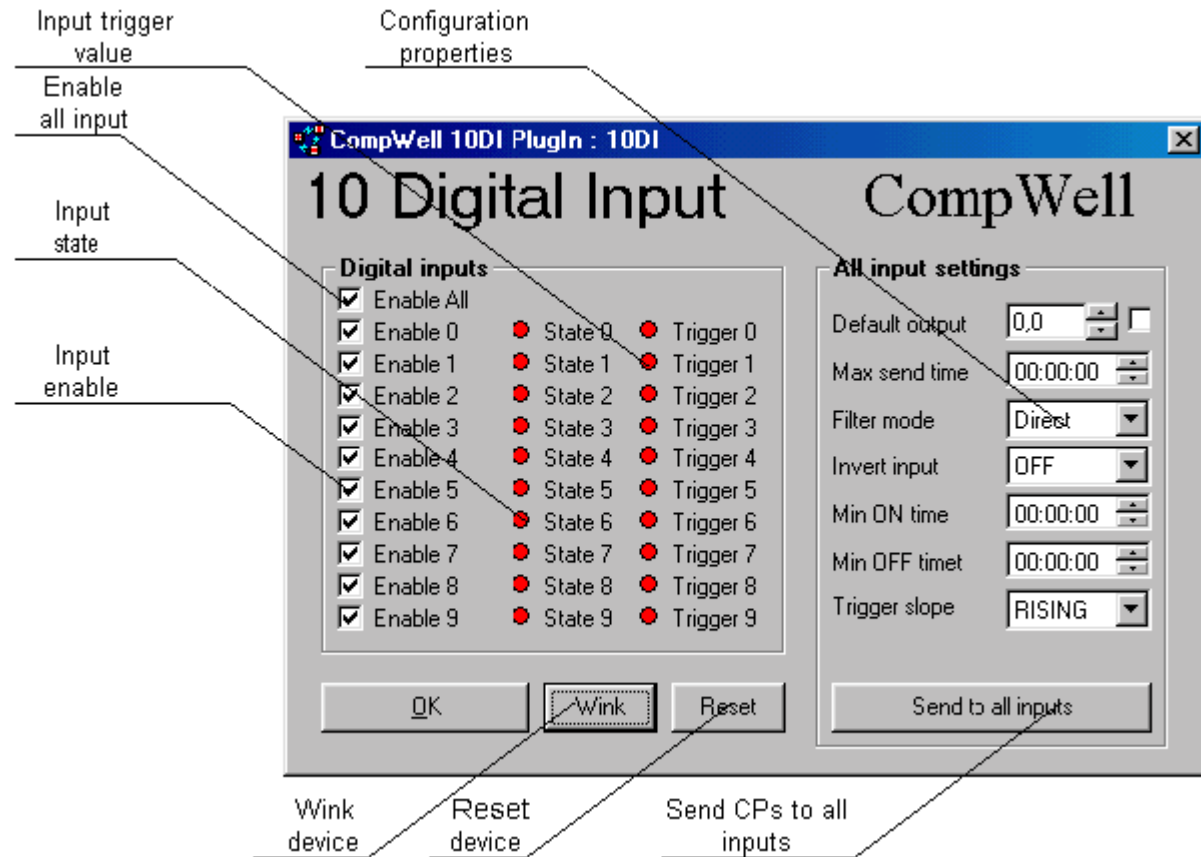
5.2.5 Configuration properties

Name	Type	Description
SCPTdefOutput	SNVT_switch	Default output network variable value at power-on or reset. See SCPT Master List for details.
SCPTmaxSendTime	SNVT_time_sec	Send heartbeat. Configuration property indicates the maximum period of time before output network variables are automatically updated. See SCPT Master List for details.
UCPTinvrtIn	SNVT_lev_disc	Inverting (ST_ON) or not (ST_OFF) digital input state.
UCPTMinInOffTime	SNVT_time_sec	Minimum input OFF time. Digital input's OFF state is only recognised when appearing for a longer period than the set minimum input OFF time. This function requires filter enable.
UCPTMinInOnTime	SNVT_time_sec	Minimum input ON time. Digital input's ON state is recognising only when appearing for a longer period than set Minimum input ON time. This function requires filter enable.
UCPTTrgSlpMode	Enumeration: 0 - RISING 1- FALLING	Choice of trigger slope.
UCPTFilterMode	Enumeration: 0 – DIRECT 1 – FILTERED	Enabling filter function.

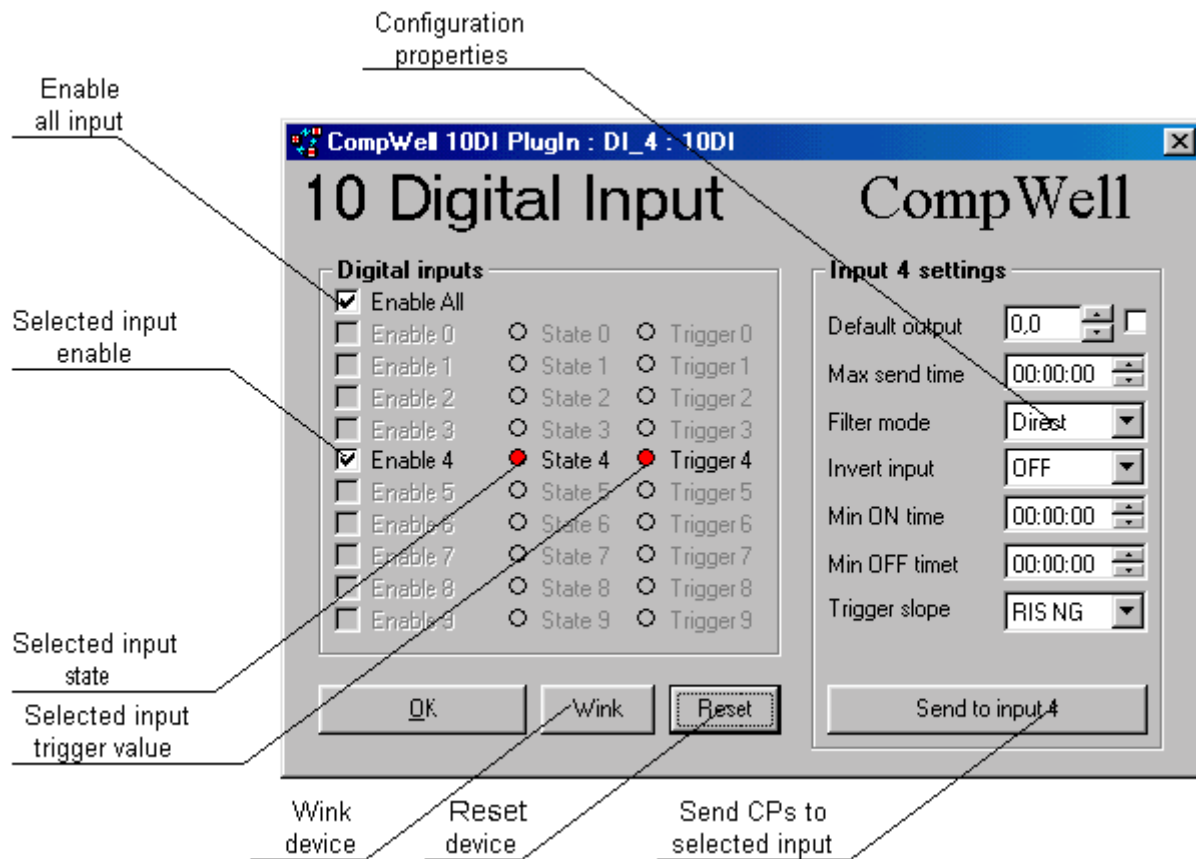
6 LNS PlugIn

6.1 Screenshots

6.1.2 Whole Device configuration



6.1.3 Single object configuration



6.2 Function

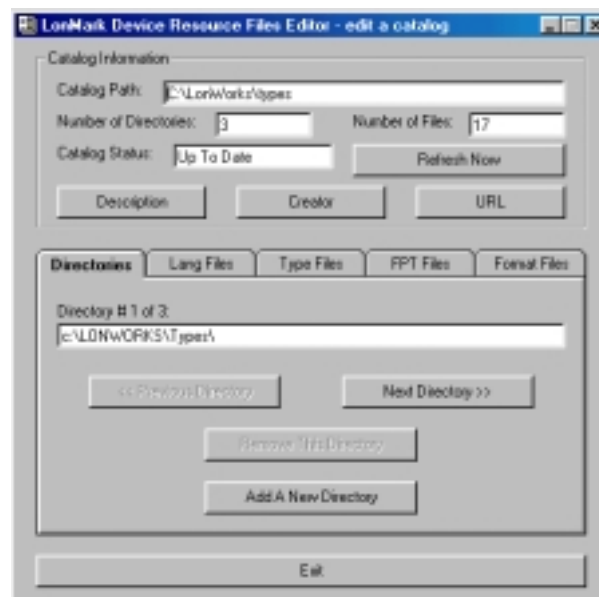
The 10DI PlugIn significantly simplifies the configuration of the device. When the "Whole Device" configuration mode is activated (the PlugIn is launched for the "device" block) the selected parameters apply to all input objects. When "Single Object" configuration mode is used (the PlugIn is launched for the "function block") the chosen parameters apply only to the selected object.

During the installation of the 10DI PlugIn Setup Program all necessary files, like device resource file, are installed. However in some cases the user have to install DRFs manually. It is described in details in the LNS documentation and in general terms in next chapter.

7 Device Resource File

When installing a DRF the "LNS Resource File Catalog Utility" program located in "Echelon LNS Utilities" directory should be used.

1. Copy Device Resource File to "LonWorks\types\User\CompWell" directory
2. Launch "LNS Resource File Catalog Utility" program
3. Click "OK" on "start-up" window
4. Click "OK" on "open a catalog" window
5. Click "Add A New Directory" button on a "edit a catalog" window:



6. Find "LonWorks\types\User\CompWell" directory and click "OK"
7. Click "Refresh Now" button on a "edit a catalog" window
8. Click "Exit"

NOTE:

It is strongly recommended that the installation of all necessary files like DRF and PlugIn is made before the device is added to the network.

8 File location

All download files are available from CompWell website:

www.compwell.biz