# NATUN
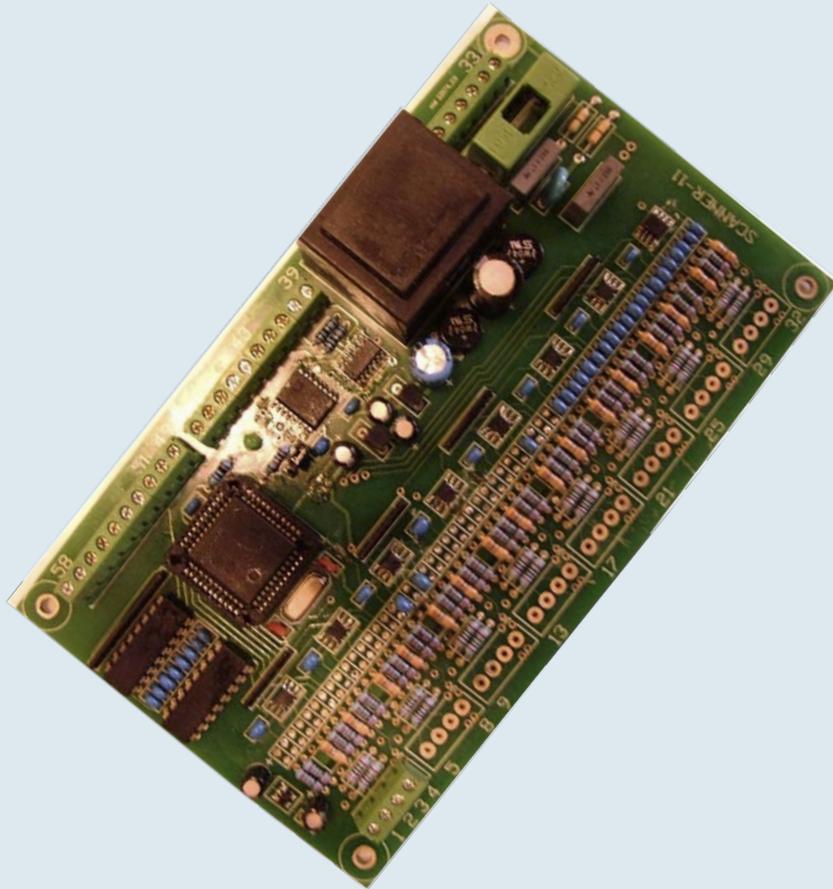# Data acquisition system



## Description

NATUN is a data acquisition system based on A / D boards managed by a microprocessor and connected to each other through one or more RS485 serial lines. The system can be connected on several lines, where each line can contain up to 32 8-channel boards; the system has a maximum of 600 channels.

NATUN is managed by a central computer equipped with a software capable of acquiring and processing all data in real time, as well as storing and sending them to an e-mail address or to a FTP site. The lines that collect the A / D cards are connected to the computer via USB ports.

The A / D boards are of different types: for 4 ÷ 20mA sensors, for Volt output sensors with or for PT100 sensors. The choice must be made at the time of the order.

Each board has its own address that can be modified on site through a dip switch placed on the board itself. The boards are equipped with a total galvanic separation between the communication and the data acquisition part.

Each card is equipped with 8 A / D circuits (one for each channel) independent from each other, in order to speed up the acquisition time (one acquisition per second of all the channels at the same time). For all connected channels, the time required for the update is approximately one minute.

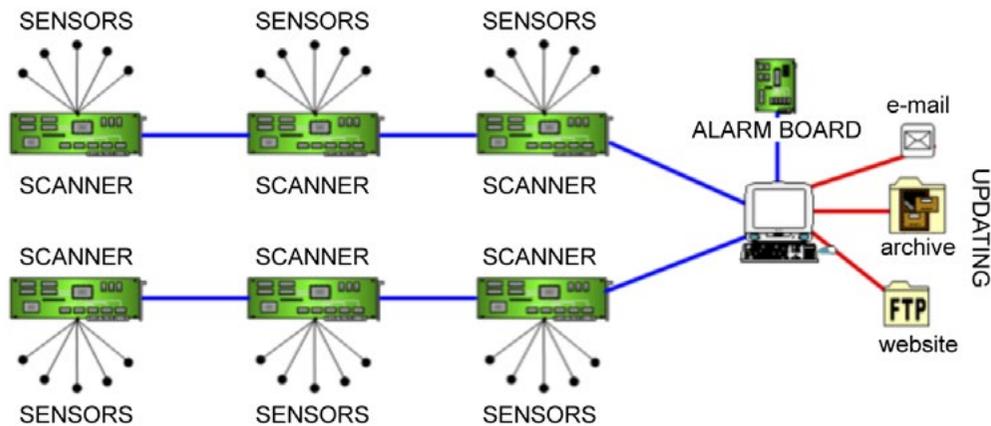The central computer can also manage alarm cards; each card is equipped with 8 output relays.

## Applications

Hydro geological, geophysical, geotechnical and weather monitoring, etc.



600 I/O

# NATUN
# Data acquisition system



| Technical features | | |
|---|---|---|
| A/D converter | ±18bit | |
| Inputs | 0-20 mV, 0-200 mV, 0-2 V, 0-20 V , 0-20mA , 4-20mA, PT100, digitals* | |
| No. of channels | 8 channels per board (max 600 channels) max 32 cards per line | |
| Sensor power supply | power supply board* +24V dc, +12V dc, +5V dc, +2V dc, +1 mA dc | |
| External power supply | 220Vcc | |
| Internal power supply | 24Vcc | |
| Consumption | 4VA each board | |
| Dimensions | Scanner board | 162 x 95 mm |
| | A/D module | 62 x 25 mm |
| | Sensor power supply board | 90 x 95 mm |
| | Alarm board | 120 x 140 mm |
| Accessories | | |
| **4-20mA board** | **NT01-AX-0420** | |
| **±2V board** | **NT01-AX-0202** | |
| **±200mV board** | **NT01-AX-2020** | |
| **±20mV board** | **NT01-AX-0202** | |
| **Alarm board** | **NT01-AX-0800** | |
| **Alarm board** | **NT01-AX-AB00**** | |
| **Transformer 230-24 Vac 300 Va** | **NT01-AX-2024** | |

\*       Specify at the time of order
\*\*     Specify the desired power supply, for example: for 24V A+24, B = + or ± ;00 = 24, 12 etc for 1 mA, mark Am01

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