Network Management System

NetPod

A complete suite...to manage your network in a easy and safe way

NetPOD increases the value of your maintenance simplifying diagnostics with an 'up to the input' interface. NetPOD is modular, and thanks to a series of PIMs (Plug In Modules) it can be customized, to fit any network size and maintenance structure. Any user can start with a very basic and easy to use system, and grow up to a very comprehensive and detailed surveillance system. NetPOd is simple and quick to configure, while always granting total control!
NetPOD is actually supervising over 3000 installations around the world, collecting mission critical data and making it available on demand to operators ANYWHERE.

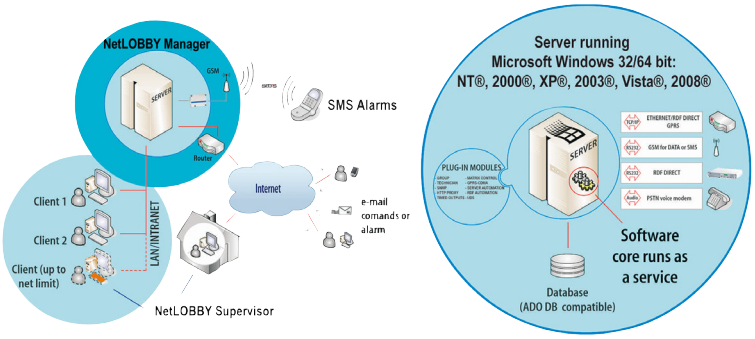
Don't loose control!

NetPOD is smart! ... it features controlled logging of users, events storing, dispatching warnings to technicians (e-mail, SMS), collecting alarms, setting alarm hierarchy, local and remote automation, tools data analysis and reports, providing complete documentation of every event. The user can log into the system only after authentication: access can be achieved with a client application (NetPOD Supervisor) using a TCP socket. Access can be local (LAN) or remote (Internet). The platform is planned to provide the maximum safety and privacy: also for companies that offer the management of the network in outsourcing or as a service.
Everyone can gain advantage from NetPOD.

A software module for every need

NetPOD is a modular suite that can grow according to management requirements. PIM (Plug-in modules) is the name of the additional software modules: they do not require additional installations, the activation key is embedded in the license.

The software



Main Features

Centralized structure, client-server type:
NetPOD Manager: the server that runs as a system service and gathers information from the remote sites
NetPOD Supervisor: the client for the management and the supervision. TCP/IP connection enables fast performances

- Access to the information is controlled by multi-level authentication; access is set site by site, and user by user, granting complete safety.
- Advanced instruments for data analysis
- Quick installation, easy to use
- Maximum system configuration flexibility, allows setup of control and monitoring instruments, without needing qualified staff
- Scalable from a few inputs to thousands of I/Os: easily upgradeable.
- SNMP interface totally integrated inside the GUI: complete management of the devices supporting SNMP, transforming it in a real NMS
- 24/7/365 screening, with real-time functions to dispatch alarms to the technicians via email, SMS, phone call: totally user customizable
- Configurations Management with files called 'devices' that can be imported/exported
- Searching, configuration, updating and controlling devices made simple with an intuitive graphical interface
- Monitoring made simple using hierarchical maps that can be customized, both in view and hierarchy
- Share notes with other users about operations on the network or on the equipment
- Data export to MS Office™ Excel™

LICENSE EXTENSION
Improve efficiency and coordination of maintenance activities
Optimize sites and equipment management thru the analysis of statistics, and enhance problem solving
Efficiently and rapidly manage the economics of your network, leaving the operators concentrated on problem solving
User-friendly and charming user interface: could it be easier ?
An investment that will be very quickly repaid
Power and reliability, designed by people that know what broadcasters want.

SPECIFICATIONS
NETPOD NMS BASIC SERIES
Ideal for small and medium installations
1 server application,1 client access, expandable on demand
Until 256 IP-RDF with 13000 OID-I/O
DBMS: MS Access / MS SQL Server
NETPOD NMS GOLD SERIES
Ideal for medium and large installations
No IP limit / no OID limit
DBMS: MS SQL Server

LICENSE EXTENSION	
At any time you can expand NetPOD license on:	
Client number:	the maximum number of simultaneous access of clients to the system
RDF number:	the maximum number of RDF managed by the NetPOD
Agent Number:	the maximum number of configurable Agent
OID:	the maximum number of configurable OID
PIM:	any additional Plug-in Module

Minimum system requirements

Platform

- NetPOD® Client & Server has been developed for Windows® environment and has been written in Borland® Delphi with strict object oriented programming techniques

Server - NetPOD Manager

- Characteristics Single processor (1.0 GHz, cache of 1 MB), 512MB RAM, HD 40 GB
- Operating system From MS Windows 2000 Professional (SP1) to Windows Vista (x32 or x64)
- and Windows Server 2008 (x32 or x64)
- Data storage: MS Access (MS Office license is not required) or MS SQL Server 2000 or better (MS SQL Server license not included)
- Network Ethernet TCP/IP 10/100 Mbps for client access

Client - NetPOD Supervisor

- (the client can run on the server machine if necessary - only for small systems)
- Characteristics CPU Pentium © 333 MHz or better, 128 MB RAM, 30 MB free HDD space
- Operating system from MS Windows 2000 Professional (SP1) to Windows Vista (x32 or x64)
- Network Ethernet 10/100 Mbps

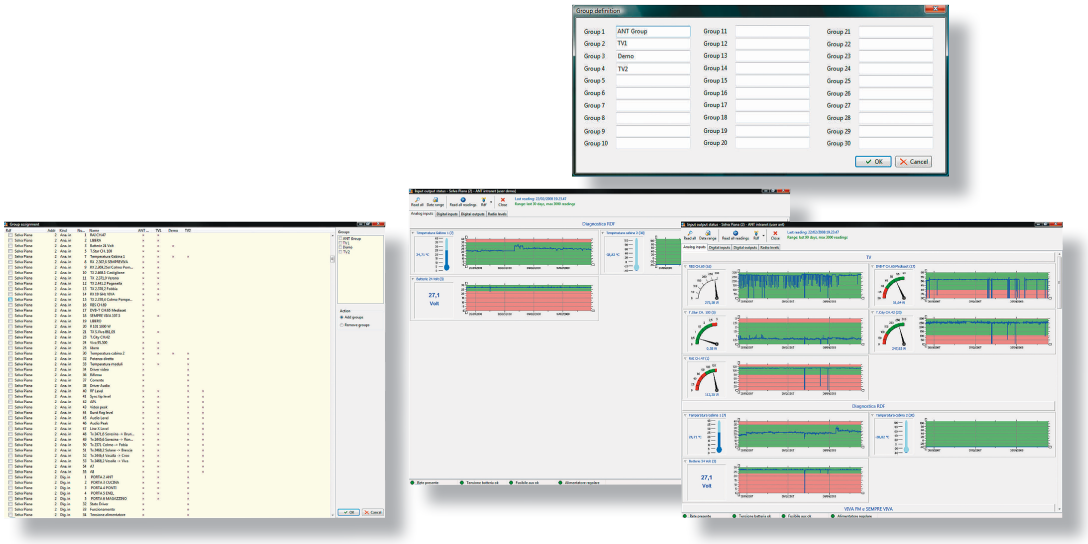
NETPOD: Plug-In Module (PIM)

SPECIFICATIONS		
PIM	**Ordering Code**	**Description**
Groups	PIM-GRP	Allows to set each I/O in specific groups; the I/O can then be seen exclusively by the users that belong to the specified group
Technicians	PIM-TEC	The system dispatches alarms and warnings to a list of technicians, via SMS, email and voice phone calls. The dispatch can be activated for any single I/O and, in case the Group PIM is installed, it will be sent only to the technician belonging to the groups defined for the I/O
SNMP	PIM-SNMP	Enables the control of devices using the SNMP protocol. This PIM makes the NetPOD a real NMS software where you can have the complete managing of your network
HTTP Proxy	PIM-HTTP	Allows to get access to the web interface of a device connected via TCP
Programmed Output	PIM-RTCC	RTCC schedules the operations to be executed at an exact time/date from the remote RDF. The user can configure operations to be performed at a preset time periodically or only once
Matrix Control	PIM-MX	Enables the user to quickly configure and easily control audio/video or IF SIGNAL MATRIXES. Any brand of routing matrix can be used, serial protocols must be submitted to ANT Group's technical dept
CDMA /GPRS	PIM-CDGP	It enables the software to use the CDMA/GPRS modems for data connection with RDF
Server Automation	PIM-AUTO	Allows to create server automation operations. Automation operations are server-side and alarm driven, so unlimited numbers of automation routines are possible with any combination and control
UDS	PIM-UDS	Stands for User Definable Screens. Enables the creation of customized views, where the user can configure I/Os to be visualized with the aid of a charming graphics
RDF Automation	PIM-RAUTO	Allows to create local automation operations (on site) to be performed by the RDF

Group Pim

Grant user access to specific I/Os

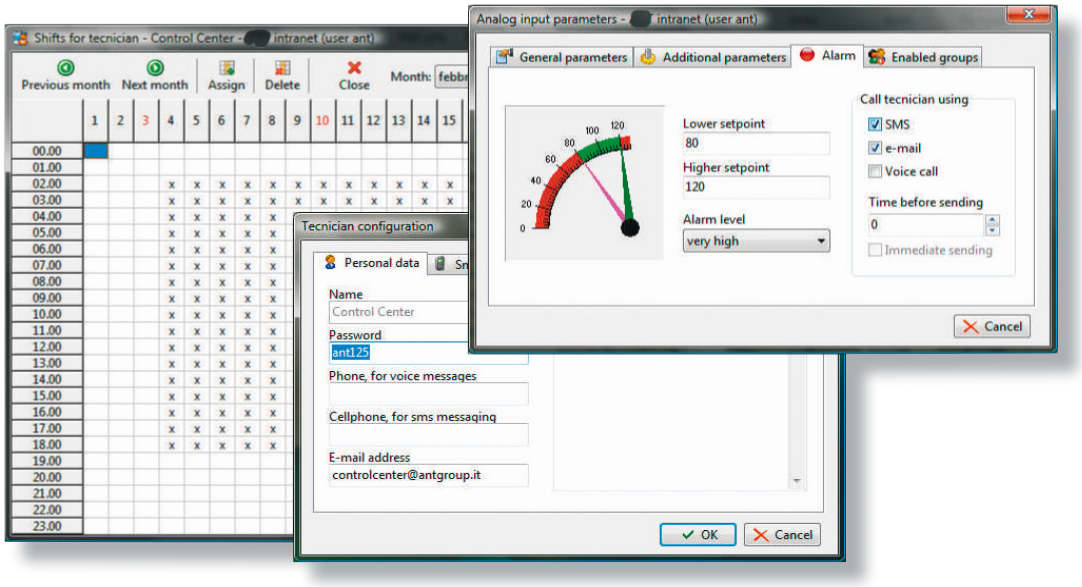
This software module enables user group management. The Group PIM establishes a relationship between users and selected I/Os on a RDF: any member of a group will be able to view only inputs, outputs, and/or to send commands belonging to his group. Every input can be associated to 1 or more groups and, in the same way,
every user can be associated to 1 or more groups. In addition, the user can be associated to read groups and/or write groups so, for example, a user can read group 1 and 2 but can only command outputs on group 2.
Group PIM and Technician PIM can be used together, so that technicians belonging to a group will be able to receive alarms (SMS, email, phone call) from I/Os on a RDF belonging to the same group. At the same time, alarms generated from unauthorized inputs will not be seen, in order not to distract him. The Group PIM is very
useful for maintenance service providers: an RDF in a site can supervise multiple broadcasters, even in competition between them; anyone will be able to read and control its own set of I/O, without any access to other data or commands.



SPECIFICATIONS
Up to 30 groups
Read/Write permission tool on each group
Easily configurable
Technician PIM compatible

Extend alarm forwarding rules

This PIM adds to the system a new kind of user archive called the technician list. Technicians are not properly system users but can interact with the system by phone, SMS or e-mail. A system administrator can assign a technician to the list. The program can be used to assign transfers and areas of responsibility to each technician.
When an alarm or a prealarm arises, the system can be configured to send voice alarms, e-mails, SMS and to wait a preset time for a return call to confirm the reception. If the confirmation call is not received, the alarm canbe sent to another technician on the list ... or... to his boss! The system administrator will assign a series of technicians to the manager, associating each one with one or more RDFs he is responsible for: only the alarms or pre-alarms coming from an assigned RDF will be received from a set technician. The Technician PIM is a powerful tool, very useful to broadcasters with large or small networks. Technicians can be divided in geographical or technical areas of responsibility so that, for example, RF technicians won't be disturbed by electrical problems, and so on. All commands, response and alarms sent/received by a technician are logged.

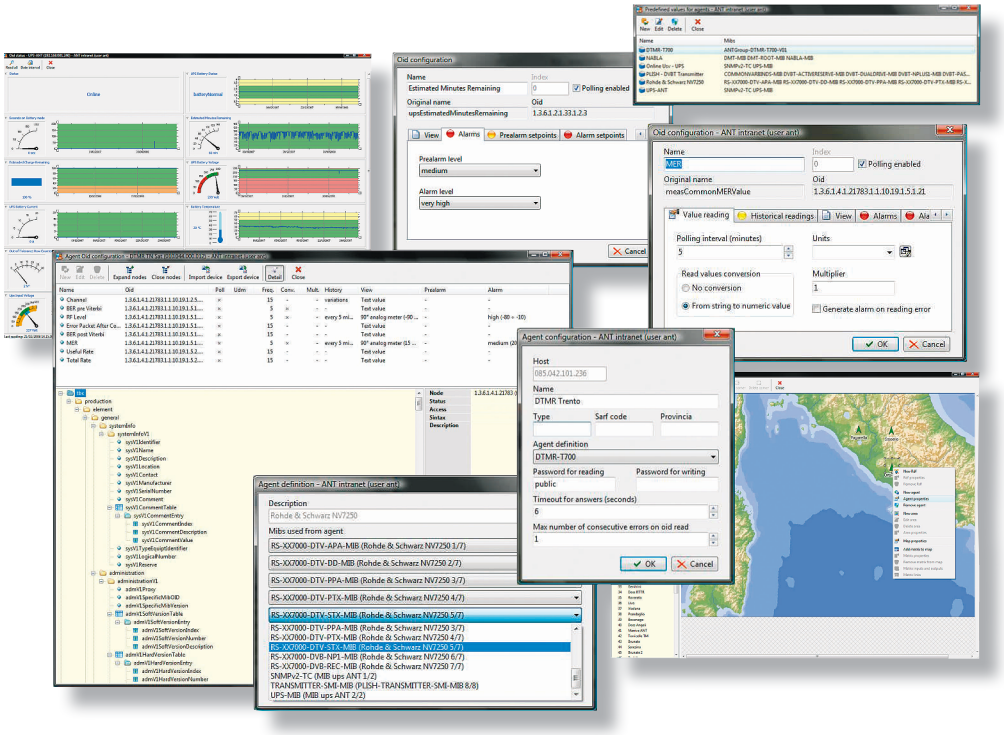


SPECIFICATIONS
No limit to technicians list dimensions
System alarms are configurable (text, language)
Customizable alarm messages
Work-transfers configurable for each technician in the list
Communication media: SMS, e-mail, phone call; more possible on request

SNMP PIM

Enable NetPOD to the Simple Network Management Protocol (SNMP)

The software module allows to easy integrating into NetPOD software all devices supporting the SNMP protocol.
SNMP PIM enables the advanced SNMP management. You can now take advantage of tools that allow you to quickly and easily work with MIBs, to configure the control agent, to set-up the trap, and more: it's also possible to set alarms depending on configured OID, to display the achieved history of information coming from the device, etc. SNMP PIM adds the benefits of the SNMP protocol interface to the NetPOD management: data storage and backup, mailing and SMS dispatch to technicians when an alarm or a trap happens, system access by authentication, device displayed on synoptic map, tool for statistical analysis, etc. With SNMP PIM, the NetPod SW will, in the same integrated system, supervise and manage in real time both SNMP interfaces and any RDF remote controlled device, to have a "one shot" complete view and supervision of the network and all its peripherals. A number of SNMP PIM is already active, with thousand of device managed: a lot of broadcaster's technicians have appreciated the power and simplicity of this software module.



SPECIFICATIONS
NetPOD NMS Basic Series
For little and medium installations
Max 256 IP and 13000 OID
DBMS: MS Access / MS SQL Server
NetPOD NMS Gold Series
For medium and large installations
No IP limits / No OID limits
DBMS: MS SQL Server
Common Characteristics
DBMS data storage
MIB management in any format and MIB storage in standard XML format
Management of predefined Agent definition and stored Agent
Advanced OID configuration
Alarm configuration on OID
Advanced Trap configuration

Integrates the direct management of devices configurable via web browser

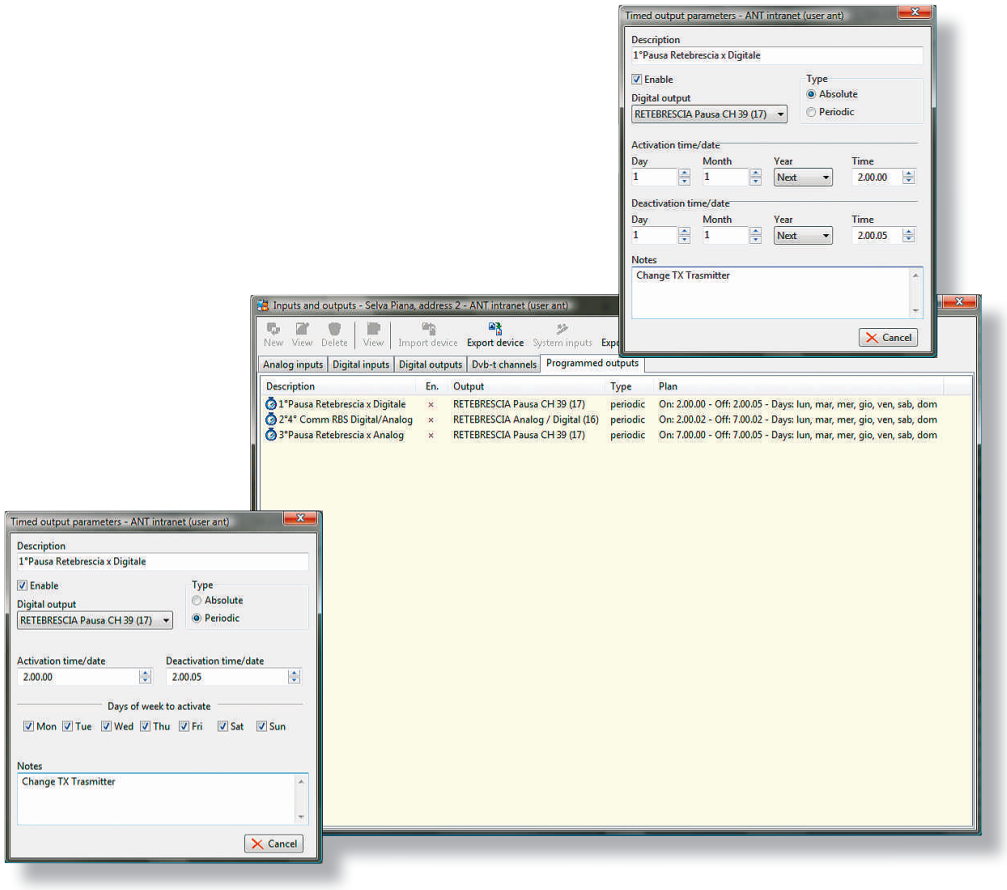
The complexity of last generation equipment has led to the development of easier and userfriendly configuration interfaces. The web technology solves this need, becoming in fact the quickest and easiest way to modify the functioning parameters of the equipment. Unfortunately, for security purposes or more simply for network structure problems, some equipment could be on a private network or on a public network but encapsulated inside a VPN (virtual private network), and therefore not reachable via internet. The "http proxy" module overcomes this obstacle allowing the management of web server enabled equipment for the NetPOD interface. Moreover, the SW module Il modulo is transparent to the internet, as it allows to access the equipment without knowing its IP address, at it is safe, as it allow the connection only if you have an access authorization. The access is simple
and user-friendly: as soon as you have opened the widow of the selected device, a button will invite you to ask for access to the web server.

SPECIFICATIONS
To connect a web interface of an equipment not directly reachable via internet;
Access depend on user privileges;
IP address of the equipment to connect not needed;

Timed Outputs PIM

To activate commands at preset timetables

The timed outputs module allow the supervisor to set up the SET and the RESET of a RDF output at a preset time or even to enable an 'automation program' periodically. Periodical activation can be programmed daily or according to a weekly timetable.
The module is therefore very useful whenever you want that the RDF execute a command, or a sequence of commands, autonomously at preset times (absolute programming) or at regular intervals (periodic programming).
When the intervention time has to be precise, with additional hardware you can lock it to a GPS reference, and have the command executed within the fraction of a second.



SPECIFICATIONS
You can program up to 16 outputs/programs for any RDF Commands program is stored inside the RDF and executed autonomously; this guarantees that the program is executed also when the communication is down
You can set weekly or daily programs

Matrix Control PIM

Switching matrixes remote management

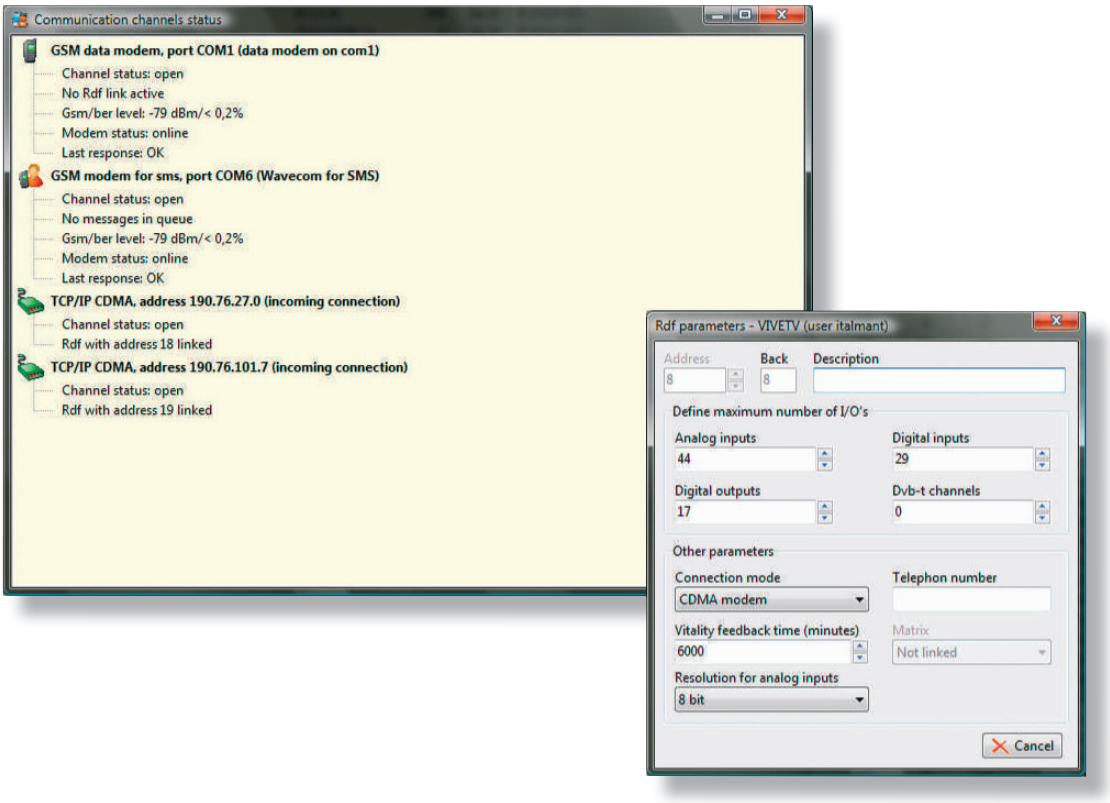
The Matrix Control Module allows configuring and managing switching matrixes to route audio, video and IF signals. The module has an editor and a display editor to configure the matrix and to display its status. The editor allows setup the matrix network and the signal routing. A simple click will then be enough to make the system find the best routing for the signal. The control system is composed of a RDF with a dedicated firmware, to be installed where the matrix is mounted, and of a matrix that must have a serial control interface, with available protocol. Matrix management can be performed via trunked Radio, GSM/GPRS/CDMA or via IP connection.

SPECIFICATIONS
Standard Matrixes :
10-300 MHz 4 x 4 IF MATRIX (IFM-0404)
10-300 MHz 8 x 8 IF MATRIX (IFM-0808)
10-300 MHz 12 x 12 IF MATRIX (IFM-1212)
Custom protocols for other matrix models and suppliers option
User-friendly interface–dedicated window interface
Real time matrix diagnostic
Real time site telemetry
Same NetPod alarm choice (SMS, E-mail, etc...)

GPRS-CDMA PIM

GPRS & CDMA modem management module

The GPRS (General packet radio service) and the CDMA (Code Division Multiple Access) use the internet over GSM (GPRS) and internet over CDMA to carry data from one remote site data concentrator (RDF) to the control center. At any connection the telecom network manager assigns an IP address, and this IP address changes every new connection. That's why we have designed a dedicated SW to manage these connections.
The IP address of the control center is fixed. This module has an additional exclusive feature: it can setup the connection at request or when necessary.
This feature will let you spare a lot of money with your telecom provider, when the data traffic is computed on the time used instead of on the data amount. In addition the module stores a log-file of the connections.

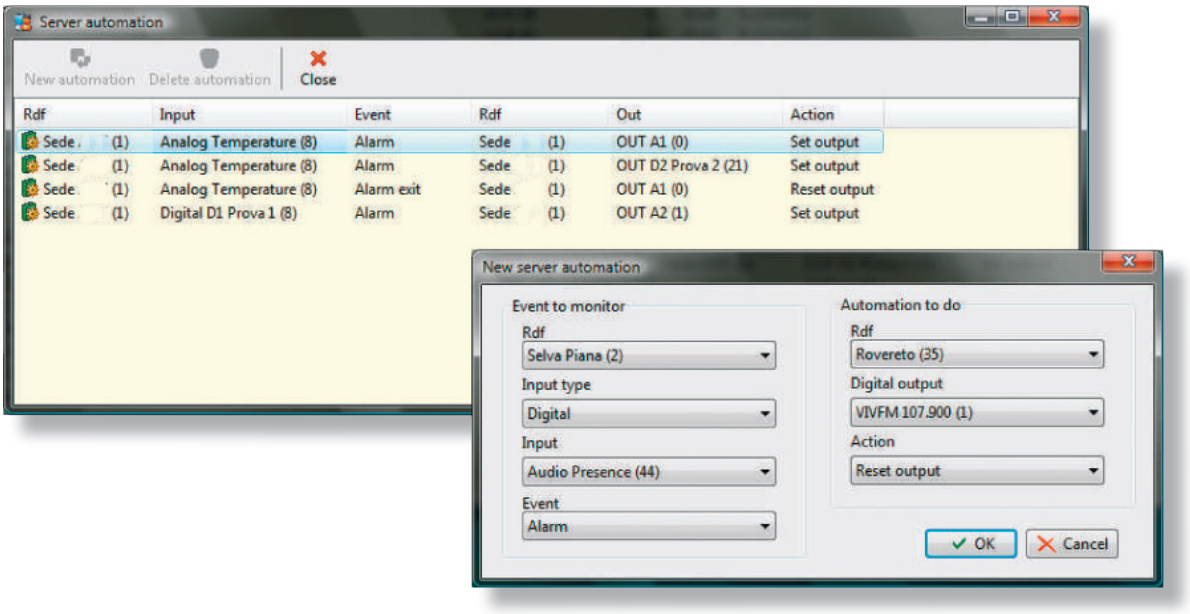


SPECIFICATIONS
No limit to the number of RDF controlled via GPRS or CDMA;
Continue or "at need" connections
Log file of the connections
IP address of the control center easily configured on the RDF

Server Automation PIM

SW Module designed for local and remote automation

The "PIM Server Automation" module allows creating, in an easy and intuitive way, any "server side" automation.
It means that the automation is not stored in the peripheral, like using "PIM RDF Automation", but it is stored in the system database, inside the NetPOD Manager software. The great advantage of this SW module resides inside this characteristic: as seen as the automation is stored in the server, you can create an unlimited number of automation routines, with any combination and control possibility. The unlimited power of the automation will, in fact, controls any analog/digital input, alarmed or pre-alarmed, of any RDF and can run a command on any output of any RDF, including itself. We talk of Alarm/Pre-alarm because the automation works according to both thresholds, when from a programmed input an alarm/pre-alarm arrives or when the alarm/pre-alarm stops.

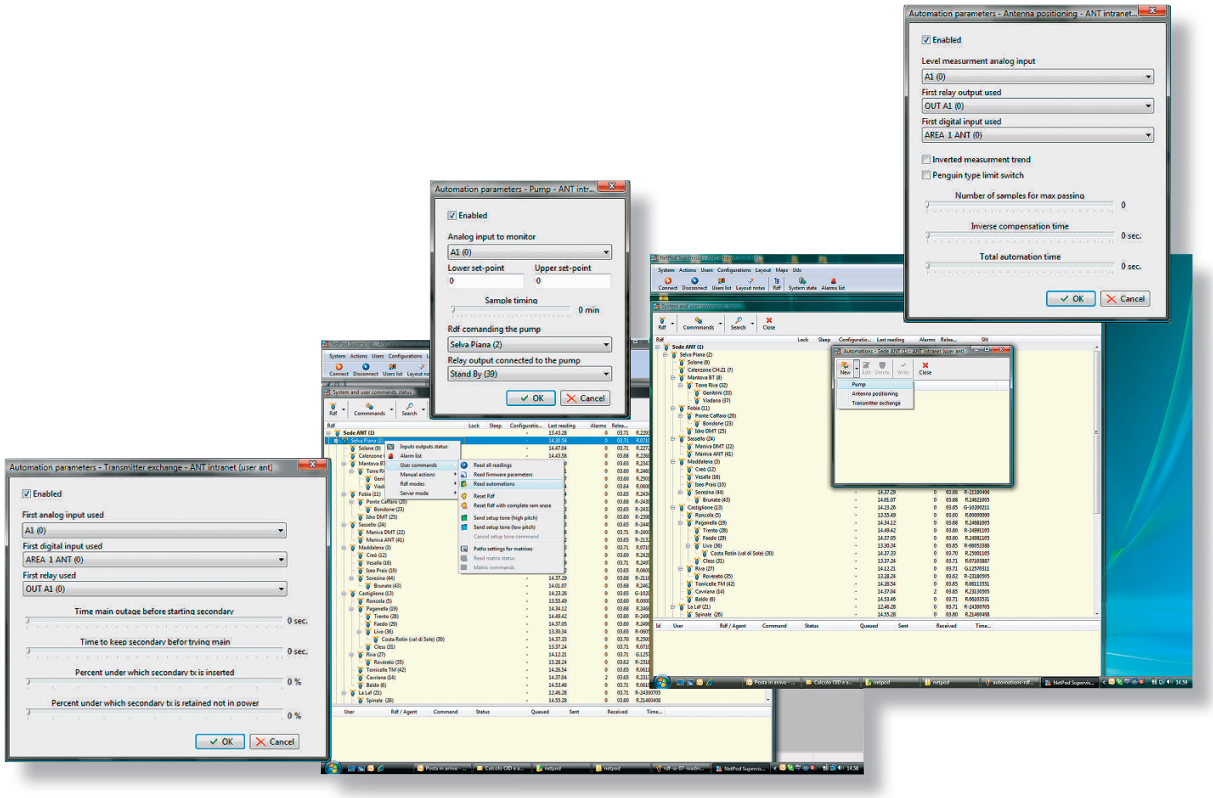


SPECIFICATIONS
You can create an unlimited number of automations in an easy and intuitive way
You can command an output on the same RDF where you are controlling the input, or in any other RDF of the network
On the same input you can create more automations that will command different outputs on different RDF
The user can intervene at any time on the outputs and send a manual command, without disabling the automation
Automations are a very powerful mean of creating automation routines

RDF Automation PIM

To add local and remote automations managed by and performed on the RDF

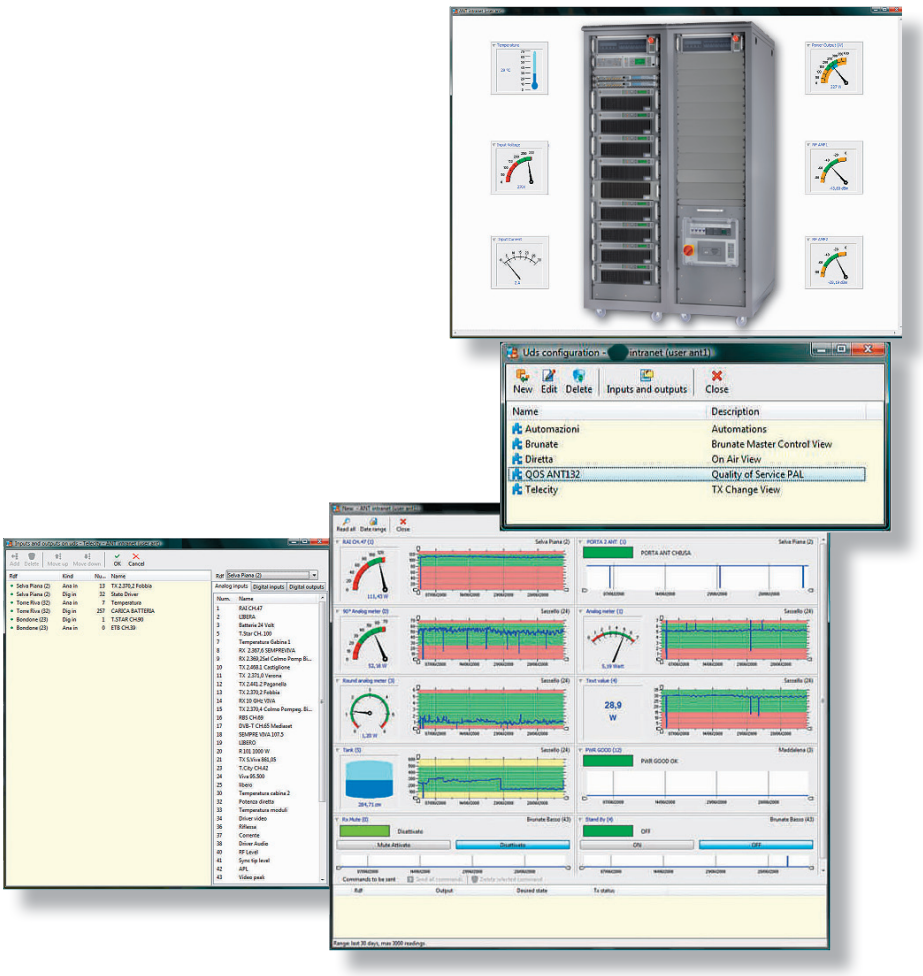
The " RDF Automations PIM" enables and configures in an easy way some automation routines that the RDF can perform on its own. You can create and store in the peripheral some "automations" and the RDF will perform them without asking or needing to connect to the control center, while using the "Server Automations PIM" local automations are anyway stored and launched in the system software NetPOD Manager. Automations will be started following an event or a level measurement ad a set input and can start on the RDF itself or on other RDF, according to the automation type, without any intervention of the control center. The automation can end automatically or after the input level, that has started the automation, return inside e set limit.
Actually the following automations can be managed: Pumps management: an analog input signal controls the start/stop of the automation and sets/resets an output on the same or on another RDF of the network, according to a preset couple of thresholds.
A typical application is the level control of a reservoir, where when the level goes beyond a limit a pump will be activated until the nominal revel is reached again; the pump can be in the same site (same RDF) or remote (another RDF), miles away.
Antenna positioning: with a single command, equivalent to activating a relays, you can move horizontally a directional antenna with rotor in order to find the maximum signal level. Transmitter switchover: you can build the basic switching logic between main and backup without a dedicated device On request, we can build additional and custom automation macros into the RDF.



SPECIFICATIONS
Up to Nr. 8 automations for any RDF
Simple and user friendly editor to build the automation cycle
Completely stand-alone automation, without need to be connected to the control center
Any automation can be built remotely by the control center and downloaded to the RDF using the connection network
Any automation can be built on a PC with NetPod SW installed and downloaded to the RDF using the PC serial port

UDS PIM

The UDS module is a very powerful graphical instrument allowing the user to easily and completely configure graphic windows: in other words, the user can define on the system custom windows and views while data arrive from a number of sites. The editor allows also to insert one or more background images or “devices”, and to connect inputs and outputs to them. The UDS, in fact, provides a powerful tool to concentrate in one single window a number of data according to user priorities and to build windows displaying custom status summaries: data arriving from the field often arrive in a confused manner, and therefore they are difficult to interpret. The UDS module solves any views need: more than ordering and eventually eliminating useless data, it allows to associate different data typologies (analog inputs, digital inputs, enumerated values and outputs) and to put them in the same window. For example, UDS can be used to concentrate all temperature measurements or radio links of a number of broadcasting sites, or to monitor the complete STL chain from the studio to the last transmitter, or to design a command panel to manage switching matrixes, or to see the status of a transmitter as you were in front of it. All this can be set in one or “n” UDS windows.



SPECIFICATIONS
Simple and intuitive configuration
“n” windows UDS definable
You can insert any input/output in any UDS
You can add name/description to any window / item
You can create UDS shared among any user that can access the system
Group PIM fully integrated: so, any configured measures is available to the logged user depending on Group PIM setup