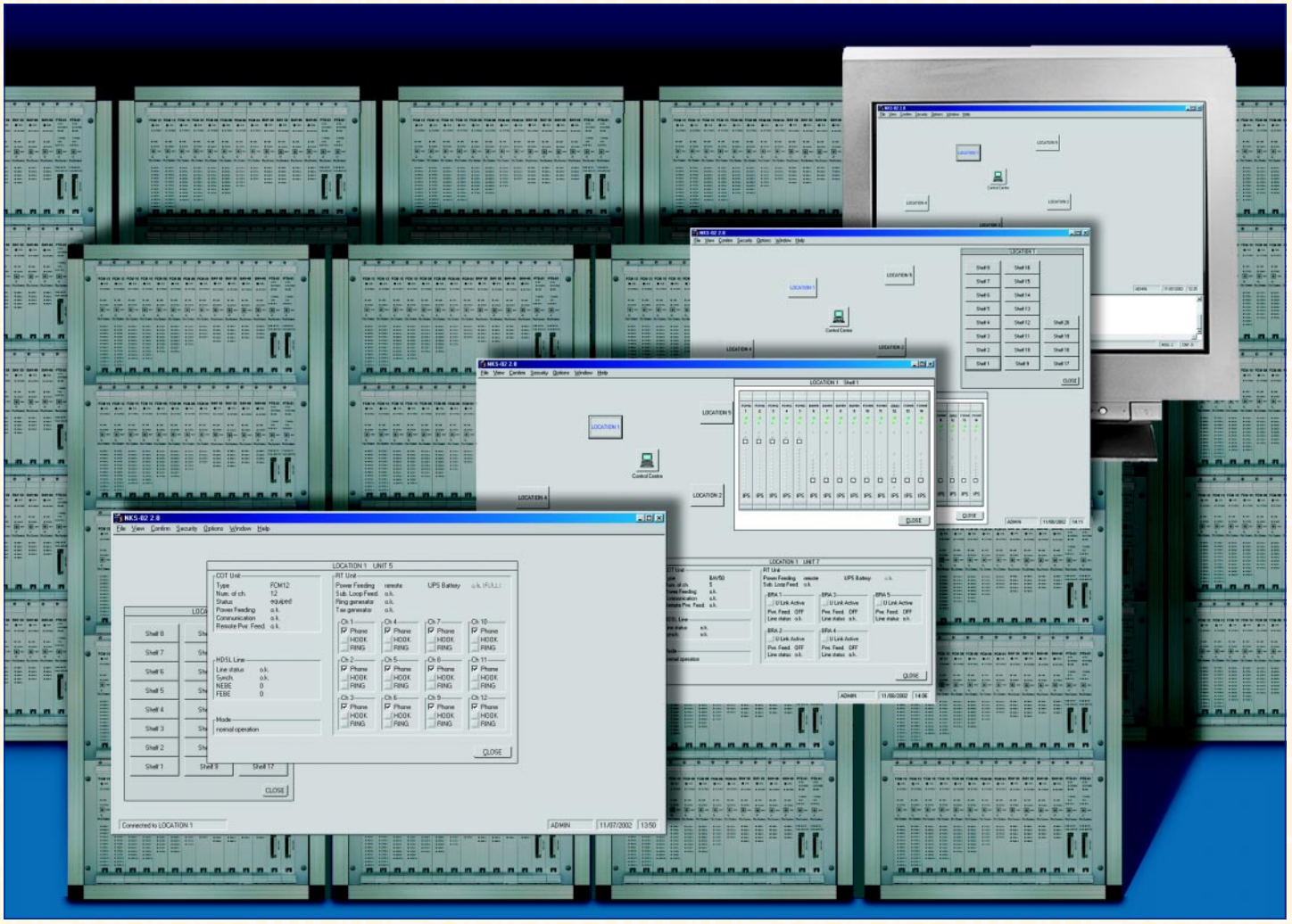
IPS
Innovative Pair-gain Systems

# NKS MANAGEMENT SYSTEM
## MAC System



Providing the best possible service to end customer is only possible when operator has all relevant information about the status of his access network always available. If some failure occurs, operator is the one who should know it first, not the customer. Failure has to be removed before customer even could detect it. This is the reason why we have developed NKS management system in IPS: to support effortless supervision and management of all out telecom equipment. It is all in one system, easy to use, with prompt response and with tracking possibility. NKS is a universal tool for local or remote management of all MACSystem equipment. With a minimal use of additional hardware you can attend all normal and faulty events that are taking place in the network.

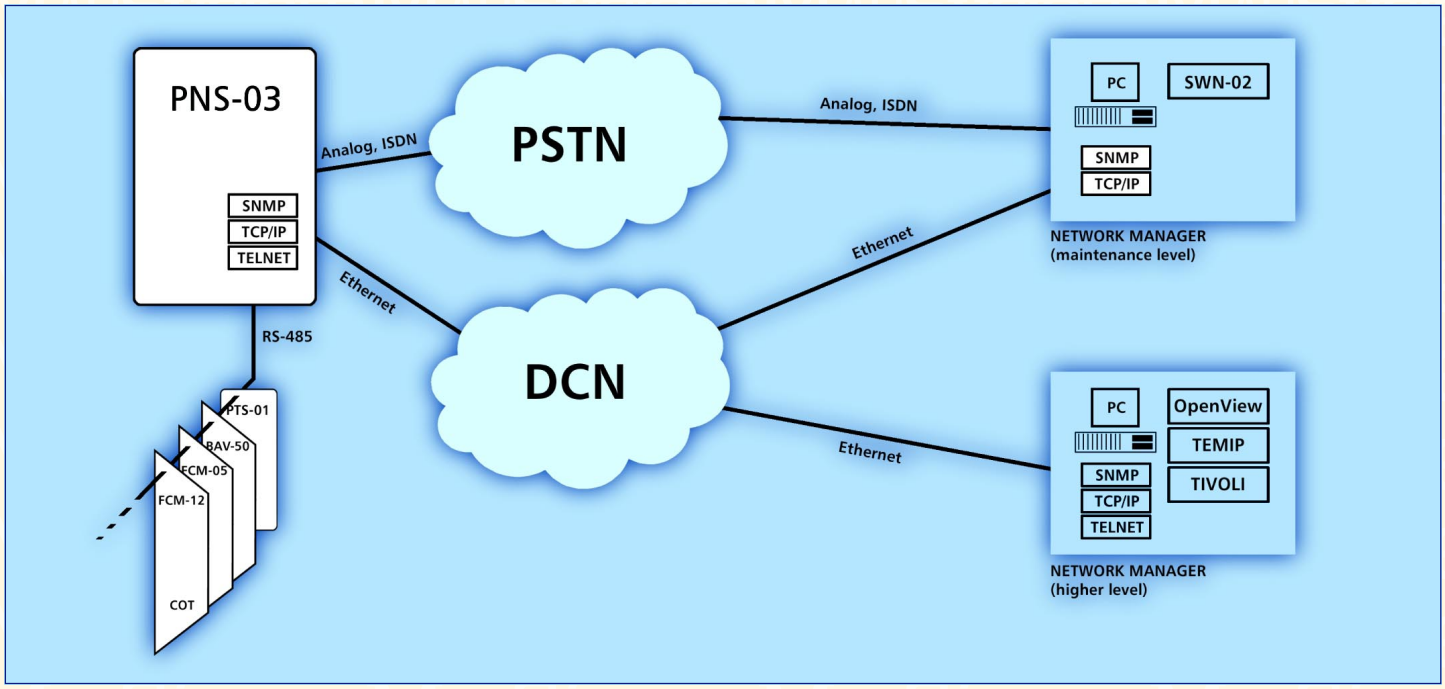
NKS system comes in two forms: NKS-02 with PNS-02 rack type peripheral device or NKS-03 with plug-in card type peripheral device. Simple management is possible even without connecting any PC computer. Any of peripheral devices can work as stand-alone units, enabling management by means of an integrated LCD display and keyboard. Much more comprehensive management is possible by means of graphical user interface (GUI) which is running on a PC computer locally or/and in remote management center. SWN-02 software (running in Windows environment) is supporting PNS-02 device, while SWN-03 is supporting PNS-02 and PNS-03 peripheral devices.

Managed COT units (**network element**) are connected to PNS device (**element manager/network manager**) via RS-485 interface. PNS is continually exchanging information about alarm and other conditions from the equipment with COTs. In case of faulty condition, the alert signal is started immediately on PNS device and the SWN (**network manager**) is contacted. Faulty conditions are reported on GUI as alarm events and alert signal is started. By means of simple intuitive user-friendly interface the supervisor can not only easily recognize failure, but also locate it and discover the possible reason for it. All faulty events are stored in log files in order to make statistical analyses and history overviews. Of course the operator can anytime browse the conditions on every supervised unit by himself without waiting for alarms. Many parameters on each individual connection can be observed (e.g. on-hook/off-hook status, ring status, phone presence, interface type, BERR (G.826), synch, different alarms etc… ). Also many commands can be sent to the managed system .

Peripheral PNS device (element manager) and control center (network manager) can communicate through PSTN (PNS-02,


PNS-03) or data network (PNS-03 only). SNMP protocol is supported as a proxy with NKS-02 and is already integrated in PNS-03. By means of SNMP protocol NKS can easily interface the higher level of (national, integral) management network by supporting OpenView, TEMIP, TIVOLI platforms. **You can really manage and supervise around a clock and from anywhere!**

# NKS MANAGEMENT SYSTEM
## Technical specifications




| | NKS-02 (PNS-02 + SWN-02) | NKS-03 (PNS-03 + SWN-03) |
|---|---|---|
| PNS type | Rack mount | Shelf (NOM-14) mount |
| Max. number of RS-485 interfaces on one PNS device | 8 | 16 |
| Max. number of COTs supported by one RS-458 interface on PNS | 112 | 112 |
| Max. number of telephone subscribers supported by one PNS (in case of FCM-12) | 8 x 12 x 112 = 10.752 | 16 x 12 x 112 = 21.504 |
| Max. number of PNS devices supported by SWN from one control center | 254 | 1024 |
| Number of additional alarm inputs (for smoke, burglar, overheating etc. alarms) | 64 | 128 (extendable) |
| LCD and keyboard for stand-alone operation | Integrated in PNS | Available on optional console unit CON-01 |
| Alarm alerting signalisation | Visual (LED) and audio, two optional lamp or bell driver outputs | Visual (LED) and audio, two optional lamp or bell driver outputs |
| Interfaces available on PNS | RS-232, RS-485; PSTN modem | RS-232, RS-485; PSTN modem, Ethernet |
| PSTN modem | Integrated or external | Integrated or external |
| Operating system for SWN | Windows 9X, ME, 2000, NT, XP | Windows 9X, ME, 2000, NT, XP |
| Graphical user interface (GUI) | Yes | Yes |
| SNMP | Proxy with SWN-02 | Integrated in PNS-03 |
| PNS to Control center connectivity | Via PSTN network | Via PSTN or data network |
| Management platforms supported | Openview, TEMIP, TIVOLI | Openview, TEMIP, TIVOLI |
| Multilevel security | Yes | Yes |
| Log files support | Yes | Yes |
| History and statistic overviews possibility | Yes | Yes |

**Note: Any specifications on this leaflet concerning performance are for information purposes only. IPS reserves the right to make changes to the specifications without prior notification.**


Cesta Ljubljanske brigade 17
SI-1001 Ljubljana • SLOVENIA
Phone: + 386 1 5005 820
Fax: + 386 1 5005 860
E-mail: sales@ips.si • http://www.ips.si


ISO 9001
Q-033