

The N-TRON™ 102RAS provides connectivity to an industrial LAN for telecommuters, or mobile users, or to remotely installed equipment, via an integrated V.92/56K modem. The small size of the 102RAS makes it ideal for placing alongside other industrial equipment to be accessed remotely.

## PRODUCT FEATURES

- One RJ-45 10/100BaseTX Copper Port
- One RJ-11 WAN/Phone Line Port with V.92/56K Modem
- Fast Data Transfer Rates:  
V.92/56K Downloads and 48K Upload Speeds from V.92 Servers  
V.90/56K Downloads and V.90/K56flex servers;  
33.6K bps Transfers with Other Servers
- Superior Standards:  
Data: V.92, V.90, enhanced V.34 & Below  
Error Correction: V.42  
Data Compression: V.44, V.42bis, MNP Class 5
- Security Support:  
Local Database or RADIUS Support  
Callback Security (local database only)
- Web Browser Configuration
- Redundant Power Inputs (10-30 VDC)
- Extended Environmental Specifications
- LED Link/Activity Status Indication
- Rugged Industrial DIN-Rail Enclosure

## PRODUCT OVERVIEW

### Compact Remote Access Solution

The 102RAS includes one integrated V.92/56K modem, housed in a compact, industrial, DIN-Rail enclosure which provides V.92/56K download speeds and 48K upload speeds when connecting with V.92 servers. Dial-in users can achieve V.34/33.6K connections.

### Secure Remote Access

The 102RAS has a built-in security database for user name and password authentication for all your remote users. It also has built-in RADIUS client support for authentication to a RADIUS server.

### Callback Security

The 102RAS offers password protection with callback security and helps reduce long distance charges for remote offices and users requiring access to the central site LAN.



The 102RAS server supports three security options. The "**fixed**" callback option stores a password and the remote user's phone number. Once the remote site enters their password, the 102RAS calls back using the number stored in its database. The "**variable**" option lets the user, such as road warriors, enter a fixed password and a variable call back number each time they call. The "**pass through**" option offers the security of password protection, while bypassing the call back process.

### Configuration and Management

The 102RAS web interface allows for easy set-up and configuration. In addition, it provides the ability to view the current line status as well as a history of past activity.

### Shared Dial-Out Convenience

The 102RAS comes equipped with dial-out support for PC users on IP. This means system administrators no longer have to dedicate a modem for LAN users who need to access information services.

When used in Modem Sharing mode, computers with network access to the 102RAS can use Telnet on port 7000 and get direct access to the modem in the 102RAS. More commonly a com port redirector can be installed on a workstation(s). A redirector adds a virtual com port to Windows and uses Telnet to map (redirect) the com port to the modem. Communication programs using this virtual com port will have its data redirected to and from the modem within the 102RAS eliminating the need for each workstation to have its own modem and phone line. Only one com port (Telnet session) can be open at a time.

## BENEFITS

### Industrial Network Switch

- Compact Size / Smaller Footprint
- Provides Connectivity to Industrial LAN via a V.92/56K modem
- Web Browser Configuration
- Provides Multiple Security & Callback Options
- High Reliability / Availability
- Extended Environmental Specifications
- ESD Protection Diodes on RJ-45 Port
- Surge Protection Diodes on Power Inputs
- Ruggedized DIN-Rail Enclosure
- High Performance

## SPECIFICATIONS

### Physical

|                           |           |           |
|---------------------------|-----------|-----------|
| Height:                   | 3.40"     | (8.64cm)  |
| Width:                    | 1.50"     | (3.81 cm) |
| Depth:                    | 3.60"     | (9.14 cm) |
| Including DIN-Rail Mount: | 4.32"     | (10.9 cm) |
| Weight:                   | 0.70 lbs. | (0.32 kg) |
| DIN-Rail:                 | 35mm      |           |

### Electrical

|                       |                  |
|-----------------------|------------------|
| Input Voltage:        | 10-30 VDC        |
| Steady Input Current: | 221mA@24V        |
| Inrush:               | 7.4Amp/0.7ms@24V |

### Environmental

|                        |                                |
|------------------------|--------------------------------|
| Operating Temperature: | -20°C to 70°C                  |
| Storage Temperature:   | -40°C to 85°C                  |
| Operating Humidity:    | 10% to 95%<br>(Non Condensing) |
| Operating Altitude:    | 0 to 10,000 ft.                |

### Reliability

|       |                  |
|-------|------------------|
| MTBF: | >2 Million Hours |
|-------|------------------|

### Network Media

|            |             |
|------------|-------------|
| 10BaseT:   | >Cat3 Cable |
| 100BaseTX: | >Cat5 Cable |

### Connectors

|                 |  |
|-----------------|--|
| 10/100BaseTX:   | One (1) RJ-45 TX<br>Copper Port  |
| WAN/Phone Line: | One (1) RJ-11<br>Modular Port<br>V.92/56K Modem:<br>Data: V.92, V.90,<br>enhanced V.34 & below<br>Error Correction: V.42<br>Data Compression:<br>V.44, MNP Class 5;<br>V.42bis |

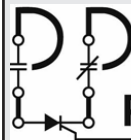
### Recommended Wiring Clearance

|        |              |
|--------|--------------|
| Front: | 2" (5.08 cm) |
| Top:   | 3" (2.54 cm) |

### Regulatory Approvals

FCC Title 47 Part 15 Class A, and Part 68  
CE: EN55022, EN55024, EN61000-4-2,3,4,5,6  
UL Listed (US and Canada) per ANSI/ISA-12.12.01-2000  
This apparatus is suitable for use in  
Class I, Div 2, Groups A,B,C,D,T5  
Designed to comply with:  
IEEE 1613 for Electric Utility Substations,  
ABS Standards for Shipboard Applications,  
and NEMA TS1/TS2 for Traffic Control Equipment

### Contact Information



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Electrical Supply Distributor

### Ordering Information

|             |                                      |
|-------------|--------------------------------------|
| 102RAS      | 10/100BaseTX RJ-45                   |
| NTPS-24-1.3 | DIN-Rail Power Supply<br>24V@1.3 Amp |

REV 070509