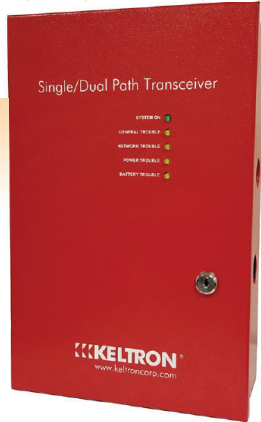


## Keltron LS NET9000 Single/Dual-Path Transceiver



High Performance  
Cost Effective  
Dual Path Option  
Secure  
Scalable  
Code Compliant



The Keltron LS NET9000 Single/Dual-Path transceiver is an Ethernet-based, IP-addressable transceiver that enables highly accurate, reliable, cost-effective fire alarm system monitoring for multi-building facilities and municipal environments. It enables near instantaneous response from system operators at a central or remote monitoring locations.

A component of the Keltron Life Safety Event Management System, the Keltron LS NET9000 transceiver uses secure, supervised Ethernet/IP communication to transmit alarms to a receiving station. It includes an option to add a cellular communications channel to provide a backup path to the network if the IP path is unavailable.

As with all Keltron solutions, a major advantage of the universally-compatible Keltron LS NET9000 transceiver is that it can interface with any fire alarm, life safety, or electronic system that uses relays to report status. It interfaces serially with 85+ models of fire alarm control panels (FACPs) and transmits signals using existing network infrastructure.

### Keltron LS NET9000 benefits

- High performance** - on-demand event-driven protocol minimizes traffic load on existing networks
- Secure** - protected against most network attacks
- Reliable** - bilateral supervision ensures end-to-end reliability. Uses cellular communications if the network is unavailable
- Flexible** - compatible with any system that uses relays to report status
- Scalable**- a system of multiple Keltron LS NET9000 transceivers can monitor thousands of contact points and an unlimited number of devices via serial data from thousands of addressable fire alarm panels
- Easy integration** - leverages existing network infrastructure and facilities, uses standard Ethernet connections and protocols, and utilizes local IT expertise
- Accurate** - provides full serial data capture of device description information as displayed at the fire/security alarm panel and minimizes programming
- Cost effective** - full FACP data capture minimizes cost of initial installation and ongoing maintenance by reducing head end programming requirements

### Keltron LS NET9000 features

- Dedicated application architecture prevents network attacks and hijacking. Configurable password protection, remote access lockdown and firmware security ensure enhanced protection.
- Provides RS232 serial-input monitoring to enable detailed dispatch by addressable device. This speeds response and enables the dispatcher to monitor fire progression through a building.
- Meets the requirements of NFPA 72 2016 section 26.6.3 "Performance-Based Technologies"
- Automatically transmits to back-up IP address
- Enables remote logging for increased system visibility
- External trouble LED and other status indicators
- Compatible with Keltron LS 7000 Alarm Management System and Keltron LCSR Ethernet Receiver
- Compact unit is easy to install
- Locally- and remotely-accessible menu system for easy configuration. Programming includes multiple parameters to optimize performance and meet the facility's specific requirements.
- Includes internal audible fault indicator and silence button
- Non-volatile memory retains transceiver settings throughout power failure
- A fault annunciation relay output may be monitored by third-party equipment
- Zones 1-10 supervised EOL, 11-12 polarity reversal
- Zones 9 and 10 may be used to monitor output relay status
- Two independent output relays for remote control

## Keltron LS NET9000 Specifications

### Communications:

- 10/100Base-T (autosense) 802.3 compliant Ethernet
- Bilateral-supervised protocol via UDP
- Addressing via static IP or DHCP
- Option to set at full or half duplex
- Option to set at 10 or 100 Base-T
- Monitoring Port: RS232

### Mechanical:

Dimensions:  
Wall-mount enclosure = 14" H x 9" W x 4" D  
PC board size = 6.0" x 6.0"

### Inputs:

Serial: RS232 interfaces with FACP serial outputs\*  
Hardwired zone inputs: 10-EOL, resistor supervised  
EOL resistor value: 10K Ohms  
Maximum input line resistance: 1000 Ohms  
Polarity Reversal - two (2) zones  
Acceptable voltage range - 5-32 VDC  
DACT capture (not available when monitoring FACP serial data)

### Outputs:

#### Output Relays:

Network communications fail relay: Form C SPDT  
Zone alarm relay: Form C SPDT  
Zone trouble relay: Form C SPDT  
Contact ratings: maximum 2A @ 220VDC or 250VAC  
Not to exceed 60W or 62.5VA

Audible device: 82dB @ 10cm, 2300 Hz continuous tone

### Setup:

- The Keltron LS NET9000 may be programmed through a network connection.
- Zone status report, test events and other data are available through the programmer's interface.

### Status LEDs:

Front panel visual indication of system status conditions:

- SYSTEM ON
- GENERAL TROUBLE
- NETWORK TROUBLE
- POWER TROUBLE
- BATTERY TROUBLE

### User-programmable settings:

Default event code for each hardwired zone  
Serial port baud rate and settings  
Enable/disable supervision of serial port  
Individual hard-wired zones: e.g. zone enable/disable and zone type (fire, medical burg, etc.)  
Security settings  
Host/network settings

### Power requirements:

Power input: 20 to 28 VDC, 24 VDC nominal  
or, 14 to 20 VAC (p-p), 16.5 VAC nominal

Power draw: 6 watts maximum

Current draw:

24 VDC: 200 mA  
16.5 VAC: 200 mA

The current rating shown is with all options installed at 24VDC input power. This represents a normal operating worst case. Refer to "Keltron NET9000 Bid Specification" for current draw details.

High-efficiency, switch-mode, intelligent power supply provides low power draw, low heat dissipation, and extended battery life.

Monitors and reports AC, battery and charger integrity.

### Backup Battery (order separately):

12 Ahr battery Keltron part# 40B007 fits in the NETBX-R9 enclosure and provides 24-hour backup

12 VDC backup battery current draw: 300 mA

An automatic battery disconnect circuit protects the battery from damage from excessive discharge.

### Environmental:

- Operating temperature: 0 to 50° C
- Storage temperature: 0 to 70° C
- Humidity: 0 to 93% non-condensing

### Keltron model numbers:

- NET9000 serial and 10 EOL, 2RP zone IP transceiver
  - NET9K-CA or NET9K-CV - cellular-based, dual-path options
  - NET9K-D - DACT capture option
  - NETBX-R9 - wall mount enclosure (included)
  - 40PS1650 - plug-in power transformer
  - 10R1640-ENC - transformer enclosure
  - 40PS044 - hardwired power transformer
- 40B007 - 12 Ampere hour 12 volt battery
- Serial interface software is ordered separately in the format 97PxxxxNK, where xxxx identifies the FACP. Call or visit www.keltrincorp.com for the latest lists.

### Ship weight:

NET9000 Ethernet alarm transceiver = 1 pound  
NETBX-R9 enclosure = 8 pounds  
40B007 battery = 7 pounds  
40PS1650 transformer = 1 pound  
10R1640-ENC transformer enclosure = 1 pound  
40PS044 transformer = 1.4 pounds

\*Note: any fire panel that is monitored by a Keltron transceiver must include a serial data output or compatible hardware outputs that are active and can be monitored. Review the compatibility charts on the Keltron Web site for more details.

Keltron develops and manufactures universally-compatible, UL listed life safety event management systems for the campus, multi-building facility and municipal markets. Solutions include Ethernet/IP, cellular, active network (mesh) radio, digital communicator/receivers, direct wire and dual-path signaling systems. This document is not intended for installation or maintenance purposes. All specifications are subject to change without notice. For more information visit www.keltrincorp.com or contact us at 781-894-8710. ISO 9001-certified, made in the USA.

