

EtherNet/IP™  
ODVA  
Modbus® TCP

# LINKnet

For Drive System Networking



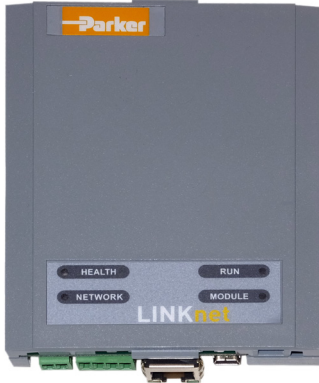
ENGINEERING YOUR SUCCESS.

# LINKnet

## Overview

### Description

Parker LINKnet is an Ethernet based version of the SSD LINK system that has been successfully used in coordinated drive systems for 25 years. It is a peer-to-peer network designed to integrate AC and DC drives with remote I/O at high speed, with or without a supervisory PLC. The network allows precise and repeatable control for complex machines and process lines. LINKnet nodes communicate over Ethernet, using either EtherNet/IP™ or Modbus/TCP.



### Flexible I/O

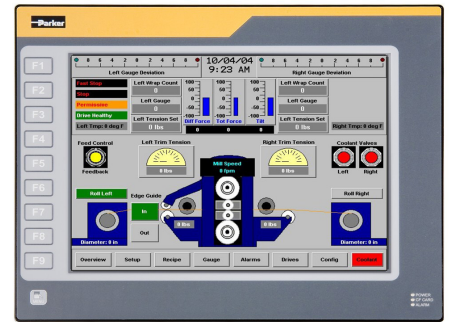
Parker has qualified third party remote fieldbus I/O modules for use in LINKnet systems. This provides users with an assortment of standard modules to choose from. Digital, analog, and specialty modules may be combined, up to 64 per node, and will be recognized and supported by Parker DSE software.

### HMI Capable

The Parker TS8000 series HMI, available in several convenient sizes, can easily be connected directly to the LINKnet system. Functions previously performed by a LINK2 display can be mapped to the TS8000. Additionally, third party HMI devices can be connected as long as they are Ethernet compatible.

### LINKnet Hardware

For AC690+ and DC590+ drives, three varieties of LINKnet tech boxes are available, including direct plug-in modules for all frame sizes and a stand-alone DIN rail variant for interfacing with other devices. For AC890 and AC890PX, LINKnet plug-in communication cards are available. For AC30 drives, no additional hardware is required. LINKnet nodes are connected by commercially available CAT-6 shielded Ethernet cable, and require no external source of power when installed as an option on a drive.



### Easy to Retrofit

LINKnet components are plug-in compatible with many older drives. This means that an existing LINK system using AC690+ and/or DC590+ units can potentially be updated to LINKnet without requiring the replacement of functional drives. The LINKnet system will provide connectivity to any Ethernet enabled PLC and with remote I/O. Legacy LINK2 touchscreens can be replaced by the Parker TS8000 series HMI.

### Communication Choices

All varieties of LINKnet are provided with two standard communication options: Modbus/TCP over EtherNet and EtherNet/IP.

**Modbus® TCP**

**EtherNet/IP™**  
ODVA

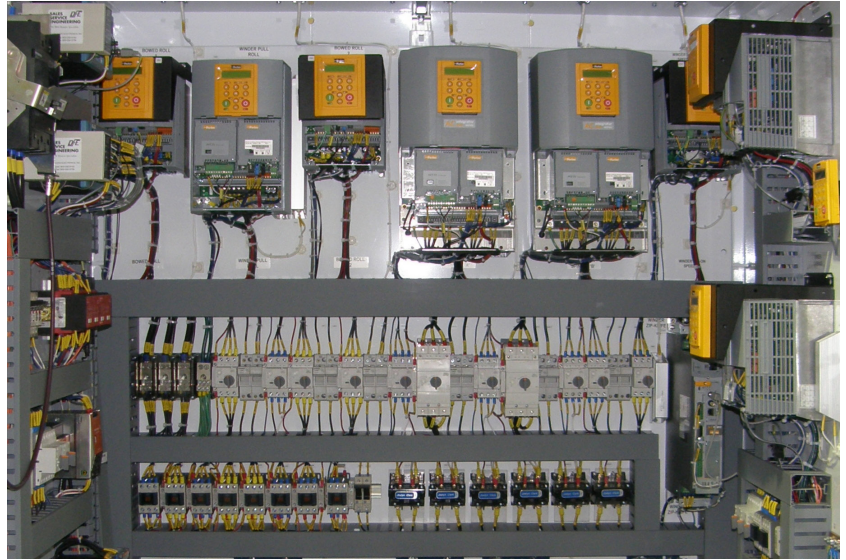
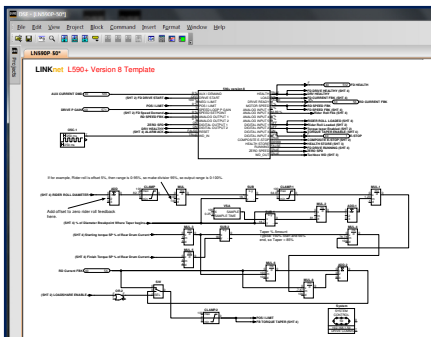
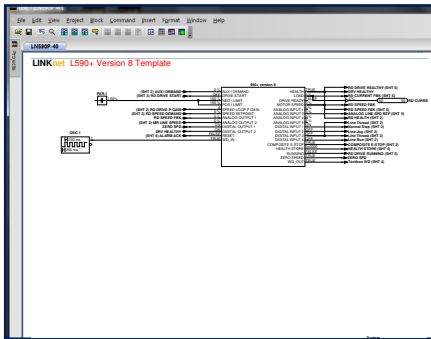
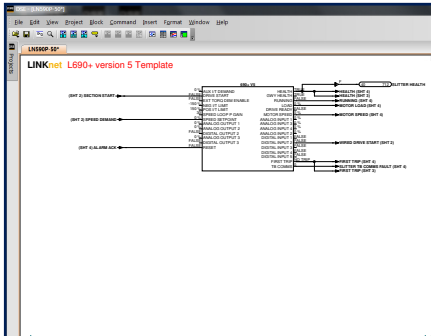
- **Modernize your line without replacing drives\***
- **Real time peer-to-peer communications**
- **High noise immunity**
- **No repeaters required**
- **Uses commercially available CAT-6 shielded cable**

\*Compatible with AC690+ and DC590+, v5 firmware on

# LINKnet

## Parker DSE Software

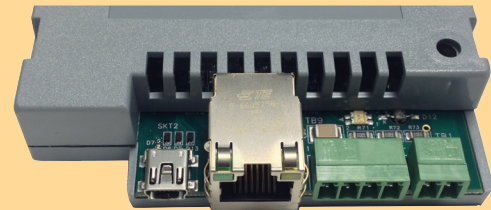
The LINKnet system runs in Parker's proven DSE software environment. DSE is a Windows based software tool using a drag and drop interface. It enables the user to expertly design systems, using the many pre-engineered macro and function control blocks in LINK's extensive software library. LINKnet nodes are mapped like any other device, and support for standard remote fieldbus I/O modules is built in.



## Typical LINKnet System Architecture

CAT-6 shielded Ethernet cable is used for all connections. All nodes are wired to a standard Ethernet switch. For PLCs that are not Ethernet capable, a commercially available protocol converter may be installed. Up to 100 nodes may be connected to the network.

## LINKnet Tech Box Connections



USB Mini B Connector    Ethernet Port    Reserved    External Power Connector (optional)

## Specifications/Technical Characteristics

<b>Power Supply</b>	Supplied by AC690+ or DC590+ drive. If stand-alone, requires 24VDC at 200mA
<b>Compatibility</b>	AC690+, DC590+ series with version 5 firmware and later.
<b>Cable required</b>	CAT6 shielded Ethernet cable (not included)
<b>Maximum cable length</b>	100 meters
<b>Maximum number of nodes</b>	100
<b>Communication speed</b>	100 Mbit/sec (100BASE-TX)
<b>Software</b>	Parker DSE v3.00 and later
<b>Protocol</b>	Modbus TCP or EtherNet/IP

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