



Module Status LED

This bi-color (green - red) LED provides device status. It indicates whether or not the device is powered and operating properly. Table 1 defines the different states of the Module Status LED.

Table 1

| Status                                        | LED state            | Reason                                                                                                                                    |
|-----------------------------------------------|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| Power off                                     | Off                  | <ul style="list-style-type: none"><li>No power applied to the device</li><li>Host LINK2 module is not running its configuration</li></ul> |
| Device in standby<br>Needs to be commissioned | Flashing green       | Device needs commissioning because of missing, incomplete or incorrect configuration                                                      |
| Device operational                            | Green                | The device is operating in a normal condition                                                                                             |
| Minor fault                                   | Flashing red         | Recoverable fault                                                                                                                         |
| Unrecoverable fault                           | Red                  | Device has identified an unrecoverable fault. May need replacing                                                                          |
| Device Self-testing                           | Flashing Red / Green | Device in self-test mode                                                                                                                  |

Network Status LED

This bi-color (green - red) LED indicates the status of the communications link. Table 2 defines the different states of the Network Status LED.

Table 2

| Status                                                                          | LED state            | Reason                                                                                                                                                                                                                                                                   |
|---------------------------------------------------------------------------------|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Power off or not on-line                                                        | Off                  | The device is not on-line. <ul style="list-style-type: none"><li>the device has not yet completed the Dup_MAC_ID test</li><li>the device may not have power applied to it. Look at Module Status LED</li></ul>                                                           |
| On-Line but not connected                                                       | Flashing green       | The device is on-line, but has no connections in the established state <ul style="list-style-type: none"><li>Passed the Dup_MAC_ID test, is on-line, but has no established connections</li><li>For a Group 2 only device: Device is not allocated to a Master</li></ul> |
| Link OK, on-line, connected                                                     | Green                | The device is on-line and has connections in the established state <ul style="list-style-type: none"><li>For a Group 2 only device: Device is allocated to a Master</li></ul>                                                                                            |
| Connection time-out                                                             | Flashing red         | One or more I/O connections are in the timed-out state                                                                                                                                                                                                                   |
| Critical Link failure                                                           | Red                  | Failed communication device. The device has detected an error that has rendered it incapable of communicating on the network. Could be duplicate MAC_ID or Bus-off                                                                                                       |
| Communication faulted<br>Received Identify Comma Fault Request<br>Long protocol | Flashing Red & Green | Specific communication faulted device. The device has detected a network access error and is in the Communication Faulted state. It has subsequently received and accepted an Identify Communication Faulted request - Long protocol message                             |

TECHNICAL SPECIFICATIONS

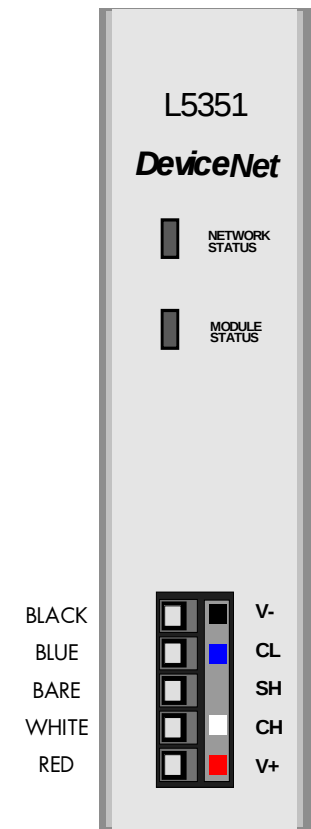
|                         |                                                                                                                                                                            |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Environmental           |                                                                                                                                                                            |
| Operating temperature   | 0°C to 50°C (32 to 122°F)                                                                                                                                                  |
| Storage temperature     | -10 °C to +70 °C (14 to 158°F)                                                                                                                                             |
| Humidity                | 85% RAH. in a dry, non-condensing environment                                                                                                                              |
| Enclosure Rating        | Touchsafe IP20. To be mounted inside a Eurotherm L53XX series enclosure                                                                                                    |
| Supply                  |                                                                                                                                                                            |
| Supply Voltage          | 5VDC, supplied by backplane<br>11- 24VDC, supplied by network                                                                                                              |
| Current Consumption     | 120 mA @ 5VDC, 30 mA @ 24VDC                                                                                                                                               |
| Power Dissipation       | 0.8 W                                                                                                                                                                      |
| DeviceNet               |                                                                                                                                                                            |
| Connection Types        | Explicit messaging and polled I/O connections provided via Predefined Master/Slave connection set.<br>Fragmentation supported for both polled I/O and explicit connections |
| Baud Rate               | 125K, 250K and 500Kbaud                                                                                                                                                    |
| Data Types              | Bits, Unsigned Integers (LINK Ordinals), signed integers (LINK values)                                                                                                     |
| Transport Class Trigger | Server Transport class 2                                                                                                                                                   |
| Indicators supported    | Network status bi-color LED, Module status bi-color LED                                                                                                                    |
| DeviceNet loading       | 27 mA                                                                                                                                                                      |
| Transfer delay          | Typically < 7 ms LINK input to DeviceNet output and vice-versa                                                                                                             |
| Configurability         | LinkCard configuration performed using ConfigEd. DeviceNet network and PLC programmed independently                                                                        |
| Connector type          | 5 pin Phoenix Combicon or equivalent. Cable connector part number MSTB 2.5/5-ST-5.08-AU                                                                                    |
| Physical                |                                                                                                                                                                            |
| Height                  | 120mm (4.72 in)                                                                                                                                                            |
| Width                   | 32mm (1.25 in)                                                                                                                                                             |
| Depth                   | 90mm (3.54in)                                                                                                                                                              |
| Weight                  | 0.16 kg (0.35 lbs)                                                                                                                                                         |

L5351 DeviceNet™ LinkCard

GENERAL DESCRIPTION

DeviceNet™ is an open-protocol network standard that provides low cost direct connectivity with DeviceNet™ compatible components. The L5351 DeviceNet™ LinkCard is part of the LINK2 family and provides a gateway between a LINK control system and DeviceNet™, when installed in a LinkStation or LinkRack. At present, the L5351 will operate as a Group 2 only server and must be controlled by a DeviceNet™ master (client), such as a scanner in a PLC.

Terminals are in the form of a pluggable screw connector. Terminal designations are color-coded for DeviceNet™ and are shown in the figure.



FUNCTION BLOCKS

The L5351 is a function block which can be used within a LinkRack L5300 or LinkStation L5392 configuration. It is accessible using the Windows™ based graphical configuration package, ConfigEd 5, by opening an L5300 or L5391 file. Clicking on **Block/LinkCard/L5351 DeviceNet** makes the L5351 block appear. Double-click on it to set the Mac ID, Baud rate and “Site” information. This refers to the slot number in the L5300 or L5391 where the DeviceNet LinkCard is inserted. Choose from J1 (leftmost) to J4 (rightmost). To send or receive bits, use a **DNet Bit Register** block; for values use the **DNet SInt Register** block; and for integers or ordinals, use the **DNet UInt Register** block. After creating the required registers, they should be mapped in the **L5351 DeviceNet** block, which acts as assembly instance (#1). For details, refer to the on-line function block descriptions and specifications under the **Help** menu in ConfigEd.