

Drive Local Area Network Plus (DLAN+) Card

fact sheet

The General Electric Company (GE) Drive Local Area Network Plus (DLAN+) card enables GE Innovation Series Controllers to interface with drives using both the GE DLAN+ communication protocol and newer communication protocols. This allows users to coordinate a mix of new GE drives with legacy products such as the AC/DC2000 drive, OC2000 and IOS (Intelligent Operator Station).

The DLAN+ card (Part # IS200EARCH1AAA) has been enhanced to improve performance including:

- Improved buffering capability resulting in a faster data rate as retransmission of lost data packets is minimized
- Improved receiver sensitivity and noise rejection improves data quality for systems with long cables runs or high ambient electrical noise
- Improved controller idle time

The new DLAN+ card is compatible with both the 5VDC interface found on the version G Innovation Series Controller and the 3.3VDC interface found on the version H Innovation Series Controller.

The new DLAN+ card is available as a renewal part and as an upgrade for existing Version G Innovation Series Controllers.

Benefits and Features

- Ease of installation and interchangeability – the new DLAN+ Module is physically and electrically interchangeable with earlier vintage DLAN+ Modules
- Improved diagnostic features – added LED diagnostic indicators
- Reliability – Improved data quality/fewer lost data packets
- Increased buffering speeds – improved overall data rate

Parts Replacement

- Legacy Innovation Series Controllers with DLAN+ interface, PN# IS215UCVGM09A, IS215UCVGM09B, and IS215UCVGM09C, superseded by Part # IS215UCVHM09C.
- Legacy DLAN+ interface card, PN# 336A5199ALP1 and 336A5199ALP2, superseded by Part # IS200EARCH1AAA
- The new DLAN+ interface card, Part # IS200EARCH1AAA, is now available as a renewal part to upgrade version G controllers



Innovation Series Controller
with new DLAN+ card
(PN# IS215UCVGM09C)



Diagnostics and LED Indicators

The front panel of the EARC has four LED indicators installed adjacent to the BNC connector.



The DLAN+ indicators are assigned as follows:

Label	Color	Interpretation
LINK	GREEN	<p>ON - The token ring has been established and this node is passing tokens correctly. If the link has integrity, this LED will be on solid whether or not this node is sending or receiving data packets.</p> <p>OFF - If the link is dead it will be off.</p>
DATA	GREEN	<p>This node has received or transmitted a data packet. Each packet sent or received will cause a brief pulse of the LED so that the relative steadiness of the LED illumination gives some sense of traffic density.</p> <p>If no data packets are being sent or received, this LED will be off.</p>
HOST	GREEN	<p>The host software in this controller is accessing the EARC control and status registers or the packet buffer memory through the PCI interface. During normal operation, there will be a close correlation between this and the DATA LED.</p> <p>If HOST is off but DATA is on, this indicates a problem related to the host driver.</p>
RCON	GREEN or RED (not at same time)	<p>Whenever <i>any</i> network node fails to receive a token in a timely manner, it will transmit a reconfiguration burst to destroy the current ring configuration (if any) thus initiating a reconfiguration cycle. This LED pulses GREEN briefly to indicate a reconfiguration attempt.</p> <p>When a link error is detected on incoming data, this LED pulses RED briefly. Causes for this indication can be either an invalid symbol (improperly framed or otherwise unrecognized), or an FCS (CRC) error in a data packet, and are likely due to the rest of the network.</p>

When power is first applied to the DLAN+ card, an internal setup will occur. During the internal setup, all LEDs will remain off. After the DLAN+ card is configured and power is applied to the host board, all LEDs will briefly blink on in unison. This indicates the DLAN+ card is configured successfully and all four LEDs are working.



For more information, contact your local GE Energy office, call 1-888-GE4-SERV or 540-378-3280, or visit www.geindustrial.com/services