| | | | |
|---|---|---|---|
| **Product Model** | **2121, 2124, 2130, 2135, 2135C** | | |
| **Product Name** | **Ethernet MicroBridge** | | |
| **Product Manager** | **John Grant** | **Contact** | **Jgrant@patton.com** |

## Who is the customer for this product?

This product is for customers who are looking for an economical solution for connecting geographically separated LANs through bridging. We sell this product to service providers, systems integrators, banks, education institutions, large offices, and the government.  This is the perfect item for SOHO applications.

The MicroBridge is available with several different interfaces:

2121 (X.21), 2124 (RS-232), 2130, (RS-530), and 2135/2135C (V.35)

**Model 2135**

**Model 2121**

The MicroBridge series products are fully compatible with all Patton Electronics bridging products. For bridging applications over leased lines or private twisted pair, we recommend Patton's Network Access Bridge Models 2111 and 2112 that allow you to link LANs that are separated by as much 10 miles.  The 2111 can support up to 2 users and the 2112 supports up to 100 users.
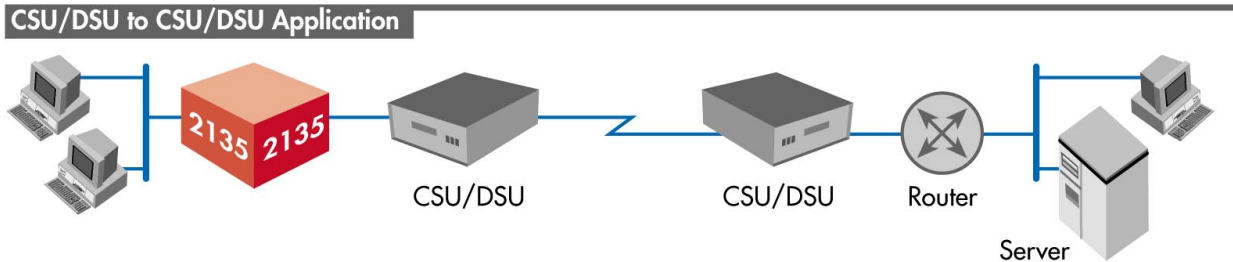
**Model 2135C**

## MicroBridge Series features and benefits

| | |
|---|---|
| **Eliminates Routers** | Don't route-Bridge Ethernet traffic across the WAN using industry standard PPP. |
| **Supports Industry Standard PPP Bridging Protocols** | Will work with all PPP compliant third-party equipment such as routers, switches, and CSU/DSU's. |
| **Protocol Independent Operation** **Transparent to high-layer protocols** | Installation is made easy, no need to worry about high layer protocol making this product incompatible. Enables broadcast, multicast, and data frames to be passed through the MicroBridge. |
| **Automatic learning and aging** | The MicroBridge only forwards frames destined for another LAN, and supports up to 4096 addresses |
| **Variety of WAN interfaces available** | Ensures a no-hassle connection to your WAN interface. |
| **10Base-T connection** | Allows you to connect directly to the LAN |
| **Compact Size** | Will take up minimal space in already crowded environments. |

## Primary application



CSU/DSU to CSU/DSU Application

The Ethernet Micro Bridge series can be used in applications where service providers are using PPP half-bridging to connect customer networks without the need for an extra router.   The serial interface to the remote bridge will function as a virtual Ethernet interface, effectively extending the router's serial port connection to the remote network.  An Ethernet interface then connects directly to a local switch.  All routing is done in the service providers' equipment, thus saving on equipment, configuration, and maintenance costs.

## Ordering information

| Model | Description |
|-------|-------------|
| 2121/DM-S/UI | Ethernet MicroBridge, X.21 DTE with DB-15 Male, 6" Cable, UI |
| 2121/DM-S/48 | Ethernet MicroBridge, X.21 DTE with DB-15 Male, 6" Cable, -48VDC |
| 2121/DM-L/UI | Ethernet MicroBridge, X.21 DTE with DB-15 Male, 6' Cable, UI |
| 2121/DM-L/48 | Ethernet MicroBridge, X.21 DTE with DB-15 Male, 6' Cable, -48VDC |
| 2124/AM-S/UI | Ethernet MicroBridge, V.24 DTE with DB-25 Male, 6" Cable, UI |
| 2124/AM-S/48 | Ethernet MicroBridge, V.24 DTE with DB-25 Male, 6" Cable, -48VDC |
| 2124/AM-L/UI | Ethernet MicroBridge, V.24 DTE with DB-25 Male, 6' Cable, UI |
| 2124/AM-L/48 | Ethernet MicroBridge, V.24 DTE with DB-25 Male, 6' Cable, -48VDC |
| 2130/BM-S/UI | Ethernet MicroBridge, EIA-530 DTE with DB-25 Male, 6" Cable, UI |
| 2130/BM-S/48 | Ethernet MicroBridge, EIA-530 DTE with DB-25 Male, 6" Cable, -48VDC |
| 2130/BM-L/UI | Ethernet MicroBridge, EIA-530 DTE with DB-25 Male, 6' Cable, UI |
| 2130/BM-L/48 | Ethernet MicroBridge, EIA-530 DTE with DB-25 Male, 6' Cable, -48VDC |
| 2135C/CM-S/UI | Ethernet MicroBridge, V.35 DTE with M/34 Male, 6" Cable, UI |
| 2135C/CM-S/48 | Ethernet MicroBridge, V.35 DTE with M/34 Male, 6" Cable, -48VDC |
| 2135C/CM-L/UI | Ethernet MicroBridge, V.35 DTE with M/34 Male, 6' Cable, UI |
| 2135C/CM-L/48 | Ethernet MicroBridge, V.35 DTE with M/34 Male, 6' Cable, -48VDC |
| 2135/CM/UI | Ethernet MicroBridge, V.35 DTE with M/34 Connector (No Serial Cable), UI |

# PRODUCT QUICK REFERENCE

*GoCard*

## Optional parts

None, units are shipped complete with:

- Ethernet MicroBridge unit

- Power supplies (external wall mount)

- User manual

**Note:** The cable for the MicroBridges comes in two different lengths.  The L=6ft (182.88cm) and the S=6in (15.24cm)

## Replacement parts

| Part Number | Description |
|---|---|
| 08055DCUI | Universal Input Power Supply (100–240 VAC) |
| 48V-PSM | –48 VDC power supply |

## Shipping/Export Information

**ECCN export number:** 8473.30.0000

**Country of origin:** United States of America, NAFTA

**Total weight boxed:** 1.58lbs (.72kg)

**Individual unit:** .72lbs (.32kg)

## MTBF/Repair Information

**MTBF**: 115289.67 Hrs. Calculation based on MIL-HDBK-217F, Notice 2 - "Parts Count Reliability Prediction"

**Mean time to repair:** 7 – 10 days

**Warranty:**  1-year parts and labor.

**Out of warranty repair rate:**  $165, flat rate – contact Tech Support for details.

# PRODUCT QUICK REFERENCE

*GoCard*

## Physical Specifications

**Dimensions:** 3.5"L x 2.1"W x 0.78"H  (9.0 L x 5.3 W x 2.0 H cm)

**Color:** Case: black Label: white with black letters.

**Case material:** Plastic, Fire retardant

## Environmental

**Operating Temp:** 32 to 122°F (0 to 50°C)

**Storage Temp:** -40 to 185°F (-40 to +85°C)

**Relative Humidity:** 5 to 95% RH, non-condensing

**Altitude:** 0–15000 feet (3,048 meters)

**Ventilation requirements:** None. Units do not require cooling fans.

## Approvals

| Safety | Emissions | Telecommunications |
|---|---|---|
| CE Marked per EMC directive 89/336/EEC and low voltage directive 72/23/EEC.<br>ESD EN61000-4-2 | FCC part 15, Class A | NONE REQUIRED |
|  | EN55022 Class A, conducted and radiated emissions |  |

## Power Supplies

**Standalone**

**AC:** Universal input, 100-240VAC, 50-60Hz, external

**DC:** -48VDC, external