

# IP20 Unmanaged Ethernet Switches **molex**

**IP20 Unmanaged Ethernet Switches are PROFINET system compliant low-profile switches with extended temperature range, making them ideal for diverse industries and in cabinet applications**

## Features and Advantages

### Metallic enclosure

Provides IP20 protection for factory floor usage

### Ease of use features

Easy set-up and integration, saving time and cost

### PROFINET system compliant

Enables quick and secure data exchange

### Versatile metal shell housing

Enables both rail DIN and screw set-up (5 port units)

### LED power indicator

Easy diagnosis

### Extended temperature range

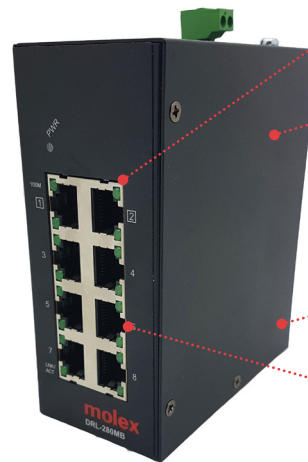
Withstands harsh environments

### Compact footprint

Provides space savings

### Traffic flow control

Avoids network congestion



## Markets and Applications

### Industrial Automation

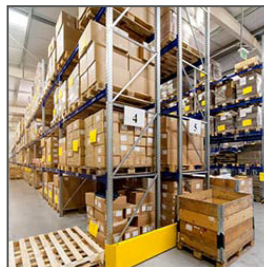
- Material handling
- Food and beverage
- Packaging and line control systems
- Mining and metal
- Water and waste management
- Substation control
- Robot cell control
- HMI/SCADA

### Industrial

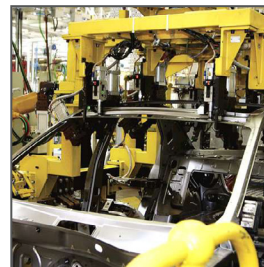
- I/O Connections
- Paper and pulp manufacturing
- Semiconductor

### Automotive

- Connectivity



Packaging



Automotive Manufacturing



Food and Beverage



Water Management

# IP20 Unmanaged Ethernet Switches **molex**

## Specifications

| REFERENCE INFORMATION            |                                 |                                                                                                                                                                                                           |                        |                        |
|----------------------------------|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|------------------------|
|                                  | DRL-250MB                       | DRL-280MB                                                                                                                                                                                                 | DRL-250MG              | DRL-280MG              |
| <b>Standards</b>                 |                                 |                                                                                                                                                                                                           |                        |                        |
| IEEE 802.3                       | 10Base-T                        | 10Base-T                                                                                                                                                                                                  | 10Base-T               | 10Base-T               |
| IEEE 802.3u                      | 100Base-TX                      | 100Base-TX                                                                                                                                                                                                | 100Base-TX             | 100Base-TX             |
| IEEE 802.3ab                     | -                               | -                                                                                                                                                                                                         | 1000Base-T             | 1000Base-T             |
| IEEE 802.3x                      | Flow control                    | Flow control                                                                                                                                                                                              | Flow control           | Flow control           |
| IEEE 802.3az (energy efficiency) | N                               | Y                                                                                                                                                                                                         | Y                      | Y                      |
| IEEE 802.1p (QoS)                | N                               | Y                                                                                                                                                                                                         | Y                      | Y                      |
| PHYSICAL                         |                                 |                                                                                                                                                                                                           |                        |                        |
|                                  | DRL-250MB                       | DRL-280MB                                                                                                                                                                                                 | DRL-250MG              | DRL-280MG              |
| Switch fabric                    | 1.0 Gbps                        | 1.6 Gbps                                                                                                                                                                                                  | 10 Gbps                | 16 Gbps                |
| Mac table size                   | 2K                              | 8K                                                                                                                                                                                                        | 2K                     | 8K                     |
| Jumbo frame size                 | 1.538K                          | 9K                                                                                                                                                                                                        | 9K                     | 9K                     |
| ELECTRICAL                       |                                 |                                                                                                                                                                                                           |                        |                        |
|                                  | DRL-250MB                       | DRL-280MB                                                                                                                                                                                                 | DRL-250MG              | DRL-280MG              |
| Input voltage                    | 18 to 30V DC                    | 9 to 57V DC                                                                                                                                                                                               | 9 to 48V DC            | 9 to 57V DC            |
| Connection                       | Terminal block                  | Terminal block                                                                                                                                                                                            | Terminal block         | Terminal block         |
| Power input polarity protection  | Yes                             | Yes                                                                                                                                                                                                       | Yes                    | Yes                    |
| Power consumption (max.)         | 3W                              | 5W                                                                                                                                                                                                        | 4W                     | 5W                     |
| Surge protection                 | Yes (3/6kV)                     | Yes (3/6kV)                                                                                                                                                                                               | Yes (3/6kV)            | Yes (3/6kV)            |
| ESD protection                   | Yes (8/15kV)                    | Yes (8/15kV)                                                                                                                                                                                              | Yes (8/15kV)           | Yes (8/15kV)           |
| Overload current                 | Yes                             | Yes                                                                                                                                                                                                       | Yes                    | Yes                    |
| MECHANICAL AND ENVIRONMENTS      |                                 |                                                                                                                                                                                                           |                        |                        |
|                                  | DRL-250MB                       | DRL-280MB                                                                                                                                                                                                 | DRL-250MG              | DRL-280MG              |
| Housing                          | Metal case (IP30 protection)    |                                                                                                                                                                                                           |                        |                        |
| Mounting                         | DIN rail, wall mount (optional) |                                                                                                                                                                                                           |                        |                        |
| Operating temperature            | -40 to +70°C                    |                                                                                                                                                                                                           |                        |                        |
| Operating humidity               | 10 to 95% RH (non-condensing)   |                                                                                                                                                                                                           |                        |                        |
| Storage humidity                 | 5 to 95% RH (non-condensing)    |                                                                                                                                                                                                           |                        |                        |
| Weight (g)                       | 145                             | 480                                                                                                                                                                                                       | 145                    | 480                    |
| Dimension (W x H x D) (mm)       | 23.40 x 109.20 x 73.80          | 46.00 x 116.00 x 99.60                                                                                                                                                                                    | 23.40 x 109.20 x 73.80 | 46.00 x 116.00 x 99.60 |
| STANDARDS AND CERTIFICATION      |                                 |                                                                                                                                                                                                           |                        |                        |
| CE                               | EMI                             | FCC Part-15 Subpart B Class A, EN55022 (Class A) EN55011 (2009 Class A), EN 61000-6-4                                                                                                                     |                        |                        |
|                                  | EMS                             | EN55024, EN61000-6-2, EN61000-4-2 (ESD: Level 3), EN61000-4-3 (RS: Level 3), EN61000-4-4 (Burst: Level 3), EN61000-4-5 (Surge: Level 3), EN61000-4-6 (CS: Level3), DRL250MG: EN61000-4-8 and EN61000-4-11 |                        |                        |
| Approval and test                | Shock                           | IEC 60068-2-27                                                                                                                                                                                            |                        |                        |
|                                  | Freefall                        | IEC 60068-2-32                                                                                                                                                                                            |                        |                        |
|                                  | Vibration                       | IEC 60068-2-6                                                                                                                                                                                             |                        |                        |
|                                  | UL, cUL and CSA ID              | ES00772                                                                                                                                                                                                   |                        |                        |

## Ordering Information

| Order No.                   | Old Engineering Number | Component                                                | Data Speed (Mb) | Ports |
|-----------------------------|------------------------|----------------------------------------------------------|-----------------|-------|
| <a href="#">112036-1000</a> | DRL-250MB              | Industrial unmanaged Ethernet switch                     | 10/100          | 5     |
| <a href="#">112036-1001</a> | DRL-280MB              |                                                          | 10/100          | 8     |
| <a href="#">112036-1002</a> | DRL-250MG              | Industrial unmanaged Ethernet switch, PROFINET compliant | 10/100/1000     | 5     |
| <a href="#">112036-1003</a> | DRL-280MG              |                                                          | 10/100/1000     | 8     |

[www.molex.com/link/ethernet-switches.html](http://www.molex.com/link/ethernet-switches.html)

Molex is a registered trademark of Molex, LLC in the United States of America and may be registered in other countries; all other trademarks listed herein belong to their respective owners.