![Matrix logo] MATRIX

PowerLine Module (PLM)

The Path to Automation

- ■ **Raw data rates up to 500Mbps**

- ■ **Ability to create Wi-Fi hotspot at the working face**

- ■ **Stream real-time machine operations data**

The Matrix **PowerLine Module (PLM)** enables strong, secure communications between a range of devices over trailing power cables. As real-time data processing continues to enable productivity gains throughout the mining industry, maximizing productivity insights, data gathering, and communications with underground equipment is more important than ever.

The Matrix PLM is easy to install and integrate into your system, where it will help you gather vital data that can improve mining performance and safety.

Put the PLM to work on:

- • Continuous miners
- • Shuttle Cars
- • Roof Bolters
- • Feeders
- • Longwall Systems

www.matrixteam.com

PowerLine Module (PLM)

Data Collection Examples:
- Machine Productivity
- Proximity Detection
- Methane Monitoring
- Live Video
- Voice and Text Communications

Components

HV Coupler

High voltage power adapter for voltages up to 8KV DC or 5KV AC
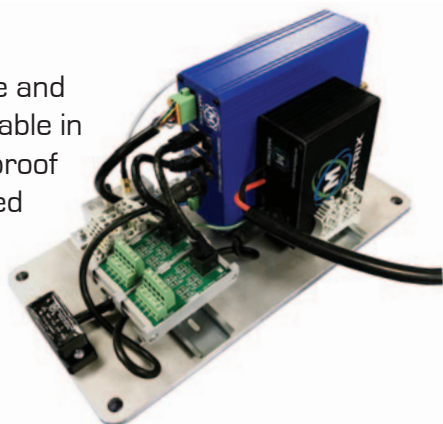
Matrix Part No. 10005984

Status Display

Provides user-critical feedback on operation of Powerline Module

Matrix Part No. 10005990

Enclosure

Powerline Module and accessories available in XPE-3 explosion-proof container-mounted assembly.

Powerline Module

Standard Part No. 10005976

Wi-Fi Version Part No. 10005982

Specifications

Voltage (Supply)	19-75 VDC
Power (Supply)	<15W
Operating Temperature	0°C to 55°C
Humidity	90% RH
Optional Wi-Fi Specification	802.11 a/b/g/n/ac Wave 2, 2.4 and 5 GHz, 2x2 MIMO, 300 and 867 Mbps data rate, 23 dBm per chain output power; 2 antenna ports
Ethernet Interface	Four 1GB RJ45 ports