pempek
made for mining

pempek
OBP 2

Pempek OBP Control System

Upgrade Pempek OBP 2

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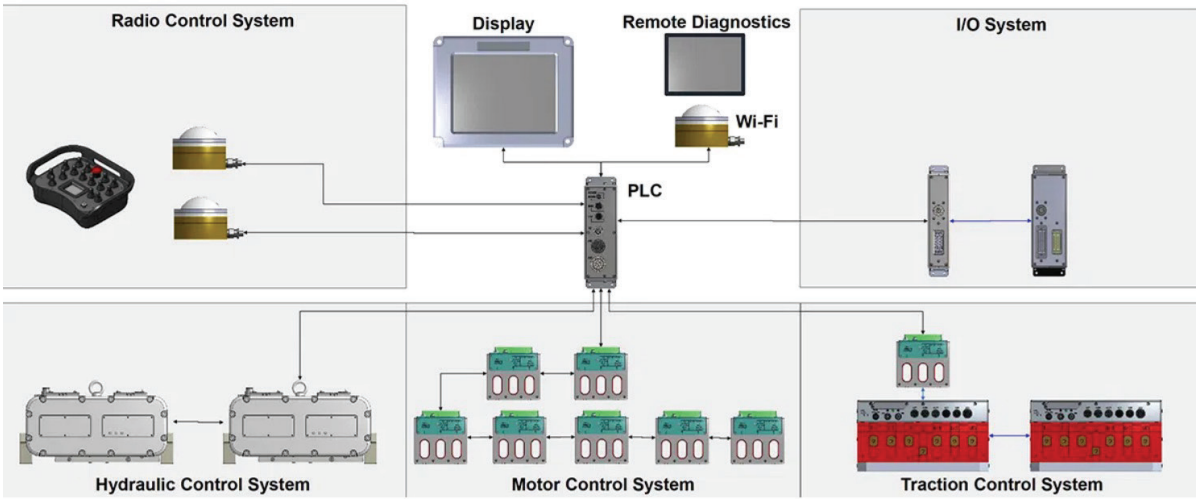
Available now from Pempek is the Pempek OBP 2 Control System Upgrade.

Upgrade immediately – without any machine wiring changes – any Pempek OBP machine control system.

Simply replace the existing Pempek OBP PLC processor with a drop-in compatible Pempek OBP 2 processor module.

Pempek OBP 2 upgrades your Pempek OBP machine with some of the features from the newest generation,
industry-leading Pempek OBP-PLUS platform.

Pempek OBP 2 has increased the dependability, safety, compliance and security of your Pempek Control system!



Pempek OBP 2 Features include:

- Remote Diagnostics – From mine surface or anywhere in the world using secure Edison Gateway PC Software
- Automatic Field Device Configuration
- New Device Configuration Page on machine-mounted graphics display. At a glance, operators see confirmation that all field devices are connected and configured properly
- Screen Mirroring: See control system diagnostic pages (including the Device Configuration Page) remotely using the Edison Screen Mirror PC software
- Telemetry: Built in data collection, buffering and streaming
- Remote Software and Parameter Management

Pempek OBP 2 Benefits:

- Quick and simple upgrade from Pempek OBP. Because the automation software remains the same (only Pempek OBP 2 extensions are added)
- No longer the need for a programming cable or professional expert at site to load device configuration
- Remotely monitor your machine
- Remotely upgrade software and parameters
- Collect and store machine data (Telemetry)

Processor Module Upgrade

The only hardware needed to be changed to convert any Pempek OBP control system to Pempek OBP 2 is the installation of a processor module. New processor modules are available in both fibre CAN bus and non-fibre bus models. Processors are footprint and wiring compatible. Simple open the box and replace the processor. It is that easy!

Processor Upgrade

Pempek Pempek OBP PLC Processor (standard)

Pempek Pempek OBP 2 PLC Processor (standard)

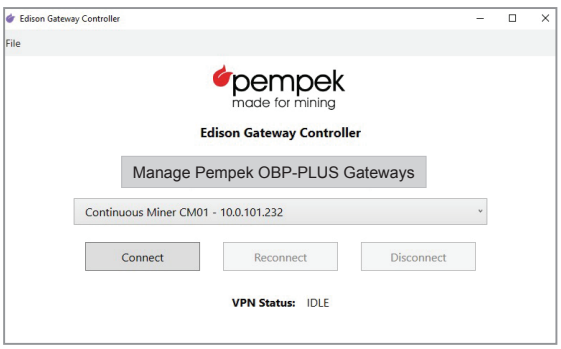
Processor Upgrade

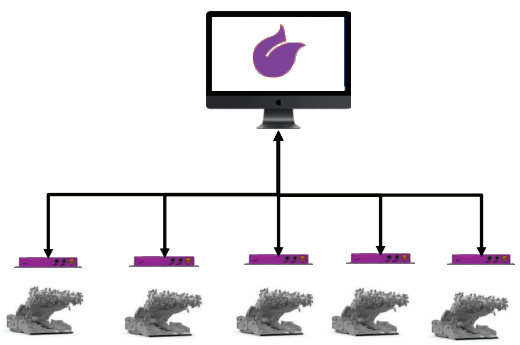
Pempek Pempek OBP PLC Processor (Fibre CAN bus Model)

Pempek Pempek OBP 2 PLC Processor (Fibre CAN bus Model)

Secure Remote Access to Any Pempek OBP 2 Machine in the Mine

Using an encrypted USB security dongle and Edison Gateway software – securely access and manage any machine on the mining network from a remote location (i.e. mine surface).





Orchid Data Collector

Pempek's Intelligent Collector Protects Against Data Loss.

Data disconnection? No data was lost with the Pempek Orchid unit.

Provides a point of collection from a number of sources.

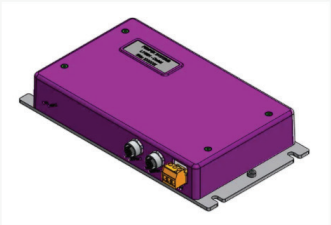
Securely connect to the machine from anywhere.

A secure gateway between machine local network and mine network.

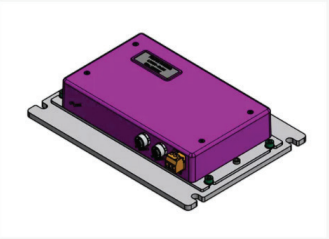
Collect machine data continuously.

Buffer data during mine network outage up to 4 days depending on telemetry loading

Buffered data recovered automatically with Pempek Royce Telemetry & Analytics system. Once reconnected, the collector will feed stored and live data simultaneously.



L11K0101



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Machine display "remote screen mirroring" (with independent page navigation).

EIP functionality setup.

A diagnostic helpful tool to validate system setup and health checks.

Two isolated network adapters.

Processor T30 or iMX6.

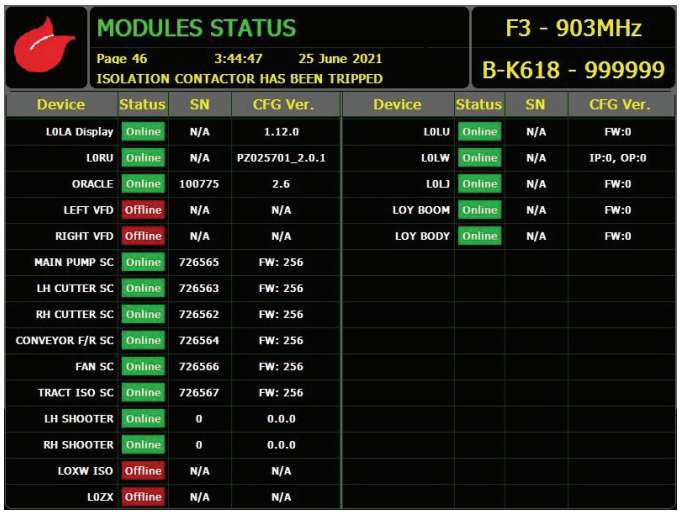
Software Windows CE or Linux.

Polymer or Aluminum Shell Enclosure.

- Provides a point of collection from a number of sources
- Securely connect to the machine from anywhere
- Secure gateway between machine local network and mine network
- Collect machine data continuously
- Buffer data during mine network outage up to 4 days depending on telemetry loading
- Buffered data recovered automatically with Pempek Royce Telemetry & Analytics system. Once reconnected, collector will feed stored and live data simultaneously
- Machine display "remote screen mirroring" (with independent page navigation)
- EIP functionality setup
- Diagnostic tool useful to validate system setup and health checks
- Two isolated network adapters
- Processor T30
- Software Windows CE
- Plate Mounting
- Polymer Shell Enclosure

Live Device Configuration Status Reporting

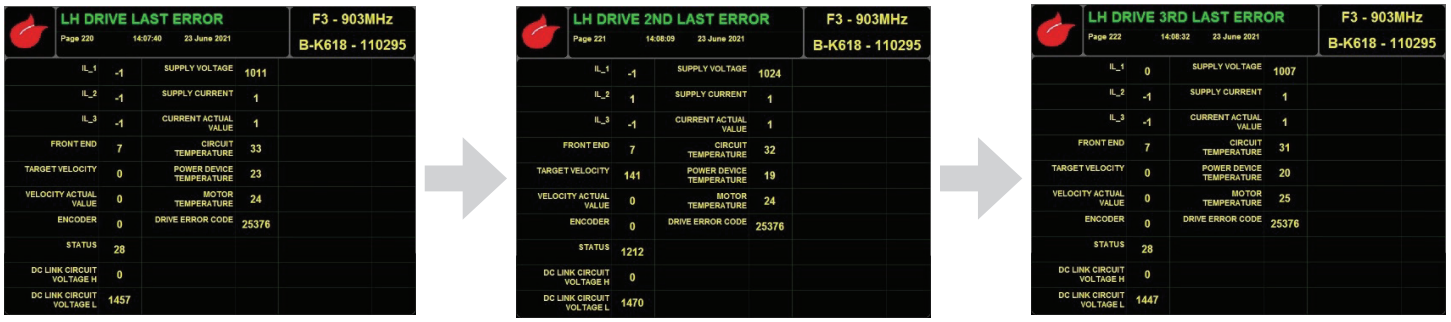
Available on the machine and via the secure remote network connection.



Device	Status	SN	CFG Ver.	Device	Status	SN	CFG Ver.
L0LA Display	Online	N/A	1.12.0	L0LU	Online	N/A	FW:0
L0RU	Online	N/A	PZ025701_2.0.1	L0LW	Online	N/A	IP:0, OP:0
ORACLE	Online	100775	2.6	L0LJ	Online	N/A	FW:0
LEFT VFD	Offline	N/A	N/A	LOY BOOM	Online	N/A	FW:0
RIGHT VFD	Offline	N/A	N/A	LOY BODY	Online	N/A	FW:0
MAIN PUMP SC	Online	726565	FW: 256				
LH CUTTER SC	Online	726563	FW: 256				
RH CUTTER SC	Online	726562	FW: 256				
CONVEYOR F/R SC	Online	726564	FW: 256				
FAN SC	Online	726566	FW: 256				
TRACT ISO SC	Online	726567	FW: 256				
LH SHOOTER	Online	0	0.0.0				
RH SHOOTER	Online	0	0.0.0				
LOXW ISO	Offline	N/A	N/A				
L0ZX	Offline	N/A	N/A				

Motor Controller Error History Analysis

View motor controller error history and status to fully understand root cause.



Feature comparison Pempek OBP vs Pempek OBP 2 Chart

Feature	Pempek OBP Standard	Pempek OBP 2
Real-time Machine Control	√	√
Secure Remote Network Connection (Edison Gateway software with security dongle)		√
Remote Diagnostics (including motor drive shutdown logs)		√
Remote PLC Software Loading (via secure network connection)		√
Screen Mirroring at Mine Surface (with remote page navigation)		√
Integrated Telemetry Data Collector		√
Integrated Telemetry Data Buffering (up to 5 days data buffered)		√
Integrated Telemetry Data Feed (dedicated Ethernet port)		√
Device Configuration Status Page		√
Machine Parameter Reporting/Auditing (via secure network connection)		√
Machine Parameter Configuration (via secure network connection)		√

Pempek OBP PLC Families Feature Comparison Chart

Feature	Pempek OBP Standard	Pempek OBP 2	Pempek OBP-PLUS
Real-time Machine Control	√	√	√
Automation Software Code Base	C++	C++	Codesys
Real-time Data Trace Debugging / Charting (also supported over remote network connection)			√
Source Code Debugger (also supported over remote network connection)			√
End User Machine Software Source Code Licensing Available			√
CAN Bus Interfaces	4	4	4
RS-422 Interfaces	2/3	2/3	2/3
Modbus TCP Master			√
Modbus TCP Slave (monitoring data only not control)			√
License Manager		√	√
Secure Remote Network Connection (Edison Gateway software with security dongle)		√	√
Remote Diagnostics (including motor drive shutdown logs)		√	√
Remote PLC Software Loading (via secure network connection)		√	√
Screen Mirroring at Mine Surface (with remote page navigation)		√	√
Telemetry Data Collector		√	√
Telemetry Data Buffering (up to 5 days data buffered)		√	√
Integrated Telemetry Data Feed (dedicated Ethernet port)		√	√
Automatic Device DCF Configuration Loading		√	√
Device Configuration Status Page		√	√
Machine Parameter Reporting / Auditing (via secure network connection)		√	√
Machine Parameter Configuration (via secure network connection)		√	√
Custom Error Message Editing by end user (without the need to recompile/recommission) software)			√
"Lesson Learned" Custom Long Text Message editing by end user (without the need to recompile/recommission)			√
Mobile Device App for remote monitoring over Wi-Fi (Edison Pocket Android / iOS)			√
Operator Login Manager (via secure network connection)			√
Tele Remote Control			√
Black Box Data Logging			√

Pempek OBP 2 is available for your legacy Pempek OBP control system immediately.

Please contact custcare@pempek.world for more information and to schedule your Pempek OBP2 upgrade.

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