New CPI Proflo® PF2
Gas Machinery Conference – January 2025

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CHART + **Howden** *A Chart Industries Company* + **CPI** *by Howden*

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Heat Transfer Systems

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Specialty Markets

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rider rings

oil wiper rings

valves

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packing rings

piston rods

pistons

www.chartindustries.com
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CPI Lubrication Product Line

Design and manufacture of a full line of compressor lubrication components, shutdown devices, and consoles
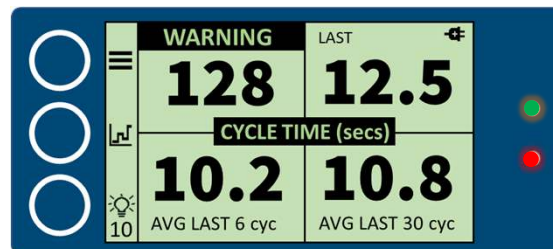
CPI Proflo® PF1
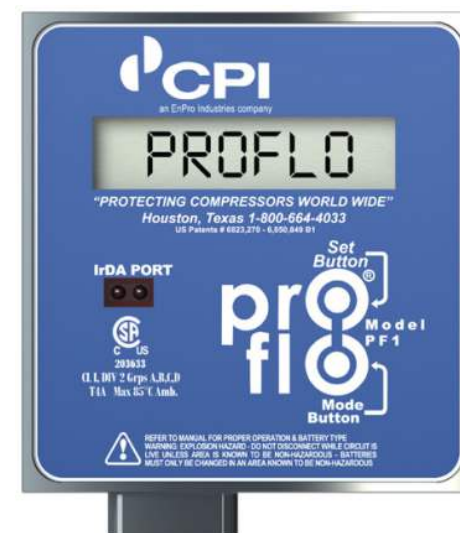
Introducing the New Proflo® PF2

New CPI Proflo® PF2 - Improvements

Large LCD Screen & LED Lights

- Larger LCD screen than PF1 and DNFT-PRG
- Displays Current, Last, Average of last 6 and Average of last 30
- Bright LED Lights added for quick status indication
- Screen Backlight is configurable to optimize battery life

LED Indication Lights:
- **Status**
- **Warning**
- **Alarm**

Hazardous Location Certified

Certification	Location
ETL*	North America
CE / ATEX	European Union
IECEx	International
UKEX	United Kingdom

* ETL is CSA / UL equivalent

Class I refers to flammable gases or vapors that are or may be present in the atmosphere

Zone 0 refers to flammable gases or vapors that are present continuously

IIC refers to all gas types under Groups A and B, including acetylene, hydrogen, butadiene, propylene oxide and manufactured gases containing more than 30% hydrogen by volume

Certifications				
ETL	ETL21CA104173915X	UL	60079-0, 6007-11, 61010-1	Class I, Division 1, Groups A, B, C and D, T4 / Class I, Zone 0, AEx ia [ia] IIC T4 Ga
ATEX	ETL21ATEX0042X	CSA C22.2	60079-0, 60079-11, 61010-1-12	
UKEX	ITS21UKEX0329X	EN IEC	60079-0, 60079-11	II 1 (1) G Ex ia [ia] IIC T4 Ga
IECEX	ETL21.0054X			Ex ia [ia] IIC T4 Ga

# New CPI Proflo® PF2 - Improvements

Wireless & Modbus Communication

- Wireless communication for data downloads and device software updates
- Modbus communications to control device settings and transfer operational data
- FREE App for IOS and Android phones

Visual Trend Graph

- Graph displays last 30 cycle times
- Visual cycle pattern
- Shows natural behavior of divider block cycles
- Prevents incorrect adjustments by the user from misunderstanding of divider block pattern
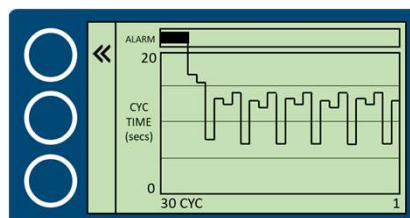
Diagnostics and Test Mode

- On-board diagnostics tools and test mode help to troubleshoot installation and operation problems in real time
- Test mode allows to manually activate output relays, confirm wiring, and test signal connections
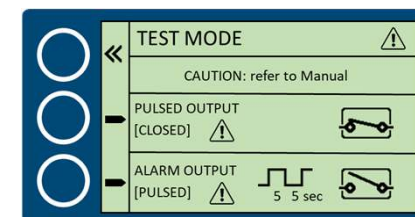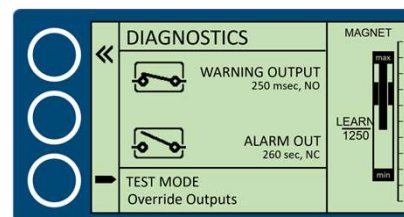
Quick-Disconnect Cable Connection

- Safe and quick disconnect of PF2 device when replacing or moving
- No wire cutting in Hazardous Location to remove device
- Wires identified to simplify the installation and prevent wiring mistakes
- All inputs, outputs and power utilize single connection cable

New CPI Proflo® PF2 - Improvements

Power Supply

- Each unit now features battery <u>and</u> 9V to 27V DC (24V nominal) power input
- Replaceable battery features a robust connection for fail-safe operation and ease of replacement

Magnet Assembly

- Improved design for longer life
- Stronger spring and magnet
- Robust pin design with machined flat for oil relief
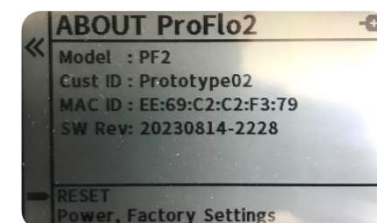

OLD

NEW

Programmable Alarm Output

- Program alarm time from 5 sec to 300 sec (5-min)
- PF1 program time was 30 sec to 240 sec (4-min)

Device Identification

- Each device is serialized
- User defined Customer ID number to manage multiple devices at the site
  - 40 digits for ID
  - Configurable through Modbus or Mobile APP only


```
ABOUT ProFlo2
Model   : PF2
Cust ID : Prototype02
MAC ID : EE:69:C2:C2:F3:79
SW Rev: 20230814-2228

RESET
Power, Factory Settings
```

Second (Configurable) Output Circuit

- Can be used for Proximity Switch to track each cycle of the divider block

        -or-

- Can be used as a Warning Output, selected as NO or NC

Data Storage

- Stores approximately 1 year of data
  - New data overwrites old data when capacity is exceeded
- Stored Data: Short-term (current, last), Long-term (Avg of 6 and Avg of 30), Total Run Time, and Power Cycles

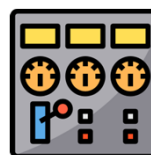# Proflo® PF2 - Communication

Mobile App
- Download Data
- Software Update
- Share Data
- Customize Unit ID

PC App
Read Downloaded Data
- Divider Block Total
- Cycle Time
- Total Run Time
- Total Cycles
- Alarm Time
- Total Oil Consumption
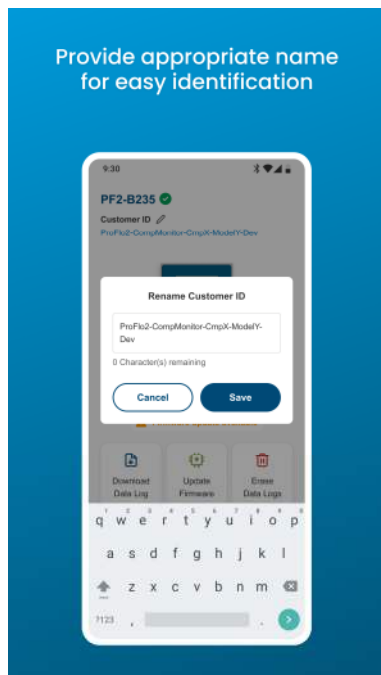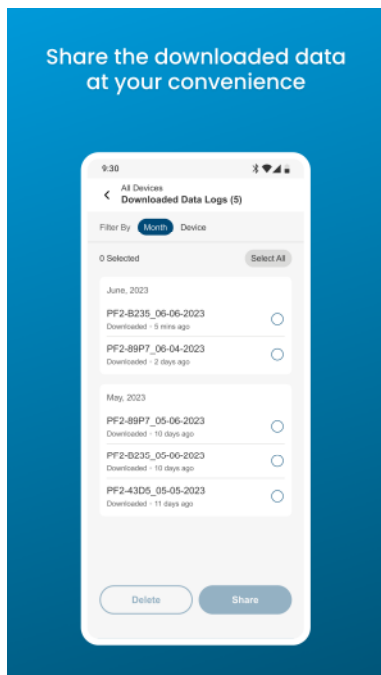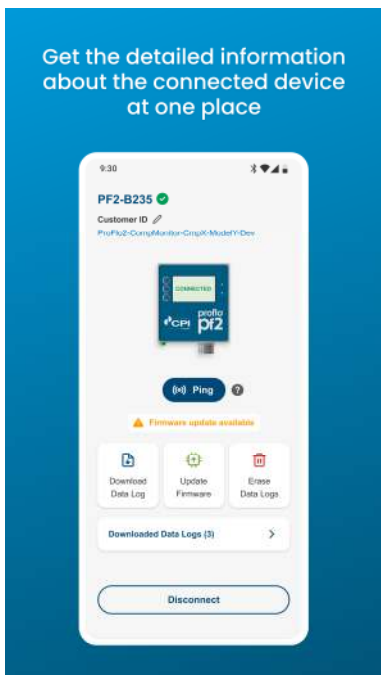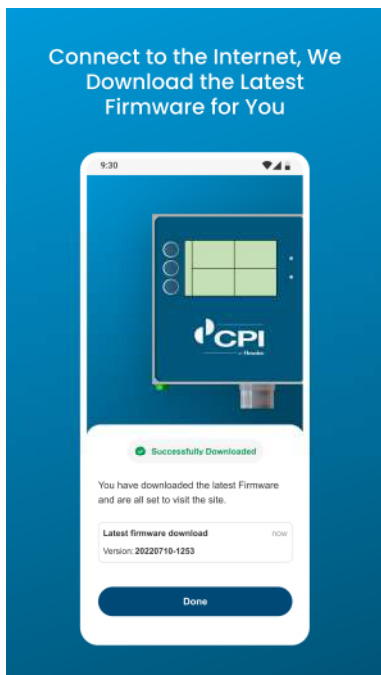- Graphical Representation

Modbus / PLC Controls
- Change PF2 Settings
- View Active Data

Proflo® PF2 - Mobile Device APP
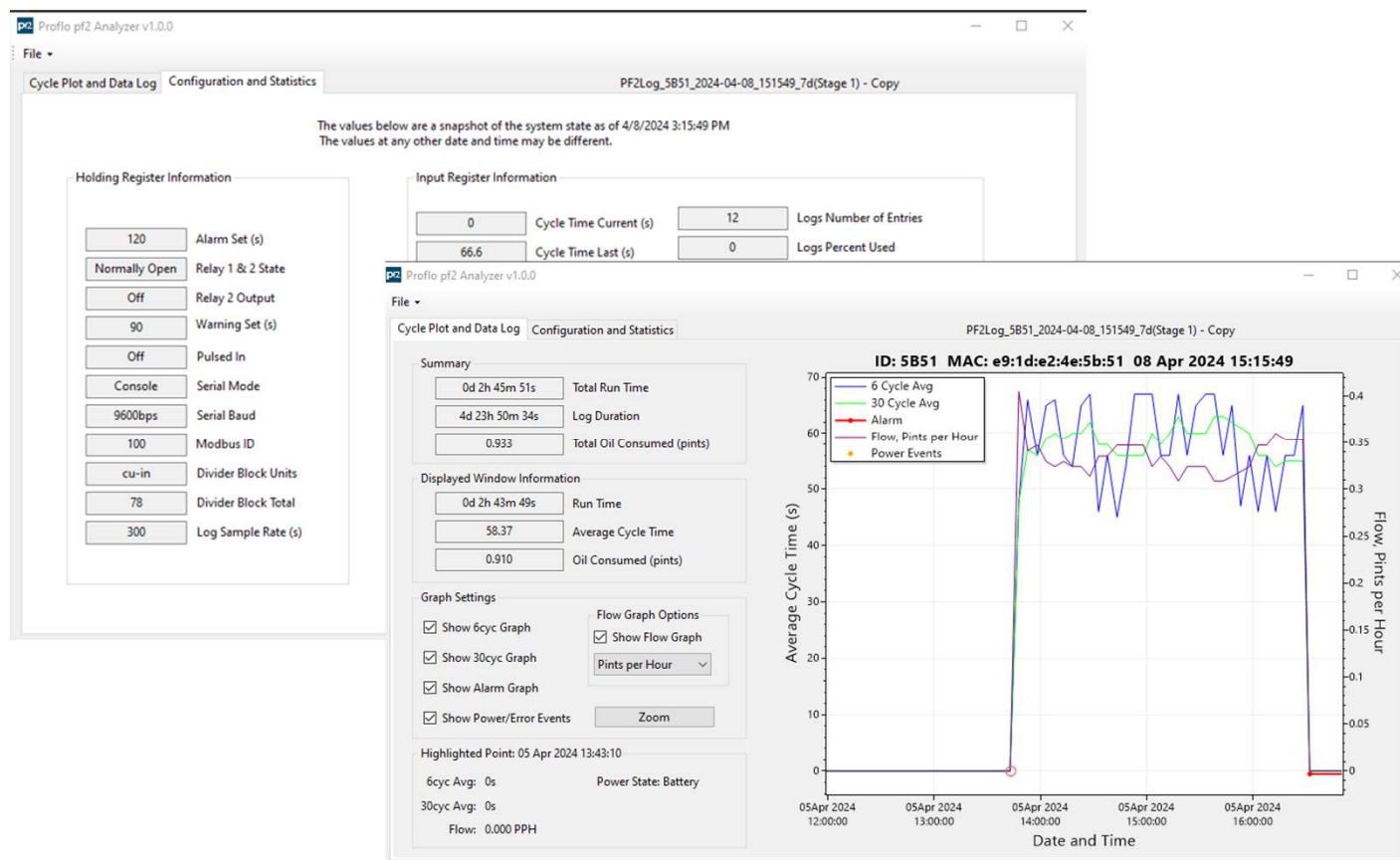
Features

- **Android or IOS**
- **Download data**
- **Upload software updates**
- **Manage multiple PF2 devices**

Proflo® PF2 - Mobile Device and PC APP

View downloadable data

- **Divider block total**
- **Cycle time**
- **Total run time**
- **Total cycles**
- **Alarm time**
- **Total oil consumption**
- **Graphical data**

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www.cpicompression.com

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