

It's All about Building a Better Product for Our Clients!

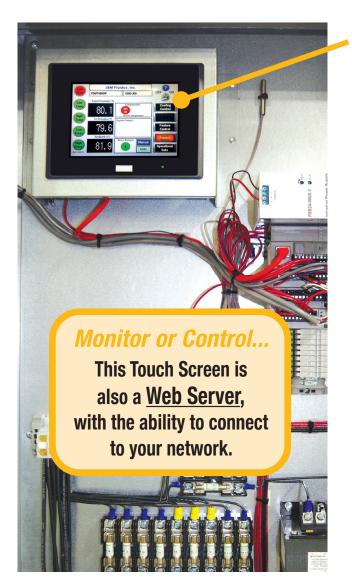




J&M Fluidics Chiller Control Features

J&M Fluidics understands that controls play a critical part in how the process chiller performs!

Built into all of our chillers are controls that bring a higher level of performance, reliability and energy-efficiency. With "Greener" J&M chillers... energy consumption could be substantially reduced in some markets. Our controls include a user-friendly touch screen, data storage, email & phone alerts, remote connectivity, (BAS) integration, plug-in control relays, free software updates, and so much more.



J&M Touch Screen User Interface

Harness the power with an industrial quality "Human Machine Interface" (HMI) that communicates with the Pentra MicroSmart Programmable Logic Controller (PLC).

Touch Screen Key Chiller Control Features:

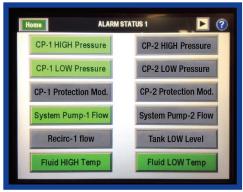
- USB update slot for IN-PLACE HMI and PLC software updates available from jmchillers.com
- Free Software Upgrades
- CE, UL Listed
- Monitor / Control your chiller from anywhere*
- 16gb SD card in slot for data storage Standard
- Ultra bright display screen with auto screen saver
- Real-time Pressure and Temperature readings
- Automatic COMPRESSOR Lag/Lead with FIVE operational modes
- Automatic SYSTEM PUMP Lag/Lead with FIVE operational modes
- Factory configured for ALL J&M's chiller options

*Some network configuration required.



J&M Touch Screen User Interface - Examples







Chiller Main Operating **Screen**

Alarm Status Screen 1

Alarm Status Screen 2



Home Screen - Help 1 of 4 sing any mobile device, scan the QR Code or sit http://www.jmchillers.com 回激於回 Discharge Pressure 142_{psi} Suction Pressure 142_{psi}

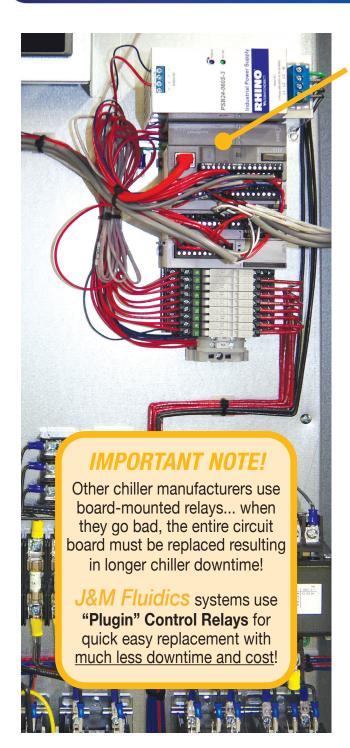
Operational Data and **Fault Log**

Tutorial and Help Screen

Compressor Operation Status and Pressures



J&M Fluidics Chiller Control Features



J&M - Pentra Microsmart, Programmable Logic Controller (PLC)

Best-In-Class PLC now available for <u>ALL</u> J&M production chiller models. Factory installed and programmed into your next J&M Process Chiller. The **Pentra PLC** will seamlessly interface with our new HMI touch screen.

Pentra Key features include:

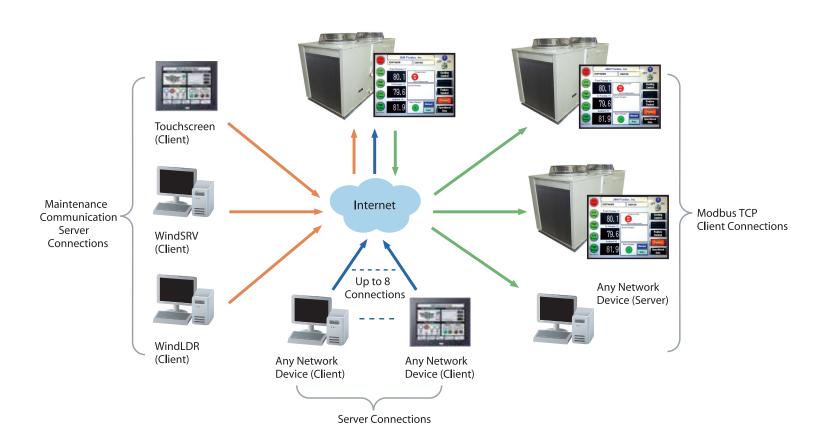
- CE, UL Listed
- Highly accurate and fast performance
- Embedded Ethernet Port
- Modbus (Slave) TCP, RTU and ASCII for integration with most Building Automation Systems (BAS)
- Optional BacNet and LONWORKS communication protocols via third party gateway hardware
- Expandable I/O, ideal for custom chiller control projects
- I/O status indicators on Pentra and I/O modules for easy diagnostics



AVAILABLE NOW!

Offering Extended Connectivity Options...

Up to 14 Simultaneous Connections! Using Maintenance Communication Server connections, up to 3 Client devices, such as OI touchscreen, WindLDR software and SCADA OPC server such as WindSRV (KepServerEx), can simultaneously communicate with your MicroSmart Pentra PLC. Using Server Connections, an additional 8 connections can be established and each connection can be defined as Maintenance, User Communication or Modbus TCP server protocol. On top of that, another 3 connections can be configured as Modbus TCP client protocol, with a maximum of 255 requests. Each request can be for different slave devices with different IP addresses on the network.





J&M Fluidics Chiller Control Features

EXCITING AVAILABLE OPTIONS...

VPN Secure Remote Connectivity



Front View

Virtual Private Networking (VPN) is used to connect a process chiller remotely over a secure network connection. A VPN can be used to remotely connect to a chiller via an Intranet or Internet connection. VPN typically does not require firewall configuration.

- Other Features: 1. Wired or wireless versions available.
 - 2. Ewon comes with NO monthly licence fees. All software included with the hardware pricing.



BACnet Gateway and Router

The Babel Buster BB2 is a BACnet gateway and router. It may be used as either or both, in various ways for different applications. In its simplest form as a router, it will route a single MS/TP network to a single BACnet IP network. It may be used as a router to interconnect multiple BACnet MS/TP via IP networks. It may even be used to traverse NAT routers on a WAN connection to connect distant buildings via Internet.



EXCITING AVAILABLE OPTIONS (continued)...



Ethernet Connectivity

Industry tailored solutions for mission-critical applications. Reliable networks globally.

- Industrial grade unmanaged network switching
- Connection Allows Interface with:
 - BacNet gateway
 - LonWorks gateway
 - Building systems for remote monitor and chiller control
 - Remote SMTP services for text or email trouble alerts



VLT® HVAC Drive

- Energy efficient control of pumps and compressors
- Precise control of pressure and flow
- Ensures maximum economy and low running cost
- Standard interface with J&M software this option can be added at anytime with hardware install



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