PUMPMATE™ 2010

Well Head Production Control

9028-2081000

FEATURES

▸ **Simple to Use**
intuitive keypad layout

▸ **LCD Display Manager**
customized LCD displays

▸ **Rugged and Durable**
NEMA 4X rated enclosure

▸ **Wireless Networking**
add sensors and controls

▸ **Simple Sensor Hook-up**
removable terminal blocks

▸ **SCADA Ready**
Modbus RTU protocol

▸ **Multi-Valve Operation**
single or dual valve control

▸ **Sensor Measurement**
pressure, flow and plunger

Remote Access

▸ **IDM™ Interactive Utility**
monitor, logger, tester

▸ **LinkMate™ vNet**
remote access and control

▸ **Any On-Line Service**
eLynx™, Wellkeeper™, others

APPLICATIONS

▸ **Well Intermitting**

▸ **Plunger / Gas Lift**

▸ **De-Watering**

▸ **Compressor Control**

▸ **Automated Soaping**

▸ **Chemical Injection**

▸ **Flow Measurement**

▸ **Flow Rate Control**

▸ **Remote Access**

▸ **Data Logging**

Versatile and rugged, the Pump-Mate™ 2010 well head controller meets a wide range of applications. Whether the application is for a basic, reliable well timer or a full featured remote access and control system with data logging, the PumpMate 2010 includes the sensor inputs and connectivity to meet all your needs. Pressure, flow and switch inputs provide stable, precise data for dynamic well control. Modbus compatibility and wireless networking seamlessly interfaces with any SCADA system. One or two pneumatic valve controls complete a suite of features to implement any well head application.

Easy to use, large, colored keys make setup and operation extremely easy. A DATA key shows the well's operating status as well as valve status, current control cycle and remaining cycle time. The AUX key shows battery voltage and product information. A 32-character LCD display is easy to read and automatically adjusts viewing for hot and cold temperature extremes. You can forget those complicated keypad key press sequences.

Have it your way using OKC's Integrated Device Manager™ (IDM) PC based software to completely customize the PumpMate 2010. Implement custom well control schemes, set up keypad LCD displays and even remotely access field installed units. The IDM also includes a built-in real-time hardware and program simulator for testing and debugging application programs on-the-fly or to just take the PumpMate 2010 for a test drive.

Wireless networking allows the Pump-Mate 2010 to extend its reach up to 3000 ft (1 km) to external sensors and controls. Wireless Bluetooth 802.15.4 xBee modules use an industry standard protocol for a secure, reliable link to multiple AeroMate™ wireless

vTagNet™ TECHNOLOGY Open wire tag connectivity and Modbus RTU support.

sensors and controls. OKC's vTagNet™ allows independent sensors and controls to share event and numeric data with all other devices on the same network to perform as a single, integrated control system. One RS-232/485 serial port provides a standard interface to existing data acquisition and SCADA systems.

Performance comes from 20 years of product evolution and refinement. Advanced electronics technology, low power operation, field proven software and rugged, durable packaging combine to provide a high level of field reliability with simple, easy operation. The PumpMate 2010's patented Enhanced Valve Switching™ (EVS) system and SunSmart™ technology combine to give reliable, long term operation over the full range of battery voltage and temperatures.

Priced to be affordable, the PumpMate 2010 offers a simple, easy to use controller with more well head control options and reliable, long term performance than any other well head controller available.

The Intelligent Solution in Wireless Control Technology

PUMPMATE™ 2010

P/N 0928-2081000 *PumpMate™ 2010 shown with optional 1-Valve control and wireless communication module.*

PumpMate™ 2010 Specifications

Manufactured under U.S. Patents 6,194,793 B1 and 6,462,507 B2

Enclosure

Weight	6.0 lbs (2.7 kg) Shipping
Dimensions	6.5 W x 8.5 H x 4.3 D (inches) (16 cm x 22 cm x 10 cm)
Type	Non-Metal, NEMA 4X
Material	Thermoplastic Polyurethane

Power
(no wireless installed)

Standard	Two 2x AA Battery Holders 1.2 V @ 2.5 Ah NiMh Cells
Drain	70 mW Average w/o xBee
External	With Batteries Removed: 4.5-20.0 Vdc @ 70 mW

Charger
(no wireless installed)

Solar	4.0-6.0 Vdc Solar Panel
External	4.5-20.0 Vdc Power Source

Switch Inputs

Connector	5-Position Screw Terminal
Inputs	Three 0-30 Vdc Input Range Settable Active High or Low Settable Time Constant

Analog Inputs

Connector	8-Position Screw Terminal 3-Wire (EXC/SIG/COM)
+Vdc	+12 Vdc
LP	Ain1 Tubing
HP	Ain2 Casing
SP	Ain3 Sales
GND	Common
Inputs	Three 0-5 Vdc Single-Ended 12-Bit ADC Conversion

Pneumatic Control

Type	Latching Solenoid with Stainless Steel Armature
Fittings	Female 1/4-18 NPT 316 Stainless Steel
Pressure	100 ±10 psi Max.

Power Connections

3-Position Screw Terminal

Id.	Pin	Function	
LOW	1	Solar Panel	(<6 Vdc)
GND	2	Common	(GND)
HIGH	3	Ext. Power	(>6 Vdc)

Temperature

Operating	-20°F to +150°F (-30°C to 65°C)

Optional Hardware

Dual Solenoid Valves
 2nd Valve control for Vent, Tank, Flow Rate, Proportional Valve or Equalizing Applications

Wireless 802.15.4 Modules
 Point-to-Multipoint Network

SNAP	1000 ft	(300 m) LOS
xBee Pro	3000 ft	(1 km) LOS

COM Port Modules
 Serial RS-232 / RS-485
 Wireless 802.15.4
 WiFi 802.11 a/b

Certifications

CSA	Non-Incendive, Intrinsically Safe for Use in Class I, Division 1 and 2 Hazardous Locations

Integrated Device Manager™

PC application software to manage field installed assets, create custom control applications, manage user LCD display screens, modify or reprogram controller, monitor remote filed units and download data logs.

Program

Graphical programming utility to generate and test user application programs. Using flow charts and a product simulator, anyone with basic programming skills can generate simple or complex programs.

Display Manager

A simple LCD display generator provides custom display formats. Simple and easy to use, you get what you want, the way you want it.

Serial Programmer

Connect a PumpMate™ controller or AeroMate™ sensors and controls via a PC's RS-232 port to re-program or upgrade field installed units.

Real-Time Monitor

Remotely access and monitor, in real time, remote field installed systems with visual aids such as gauges, event buttons and LED indicators.

CONTROL KEYS

PWR	*Power On/Off toggle switch.*
AUX	*System information menu and network setup.*
DATA	*Operating status and stored data menu.*
SET	*Operating parameters and set points setup menu.*

SET KEYS

◄ ►	*Move cursor to the right or page to sub-menu.*
▲	*Increments displayed item, or Previous in list.*
▼	*Decrement displayed item, or Next in list.*

◁ OKC Products, Inc.