HAWK M2M

Product Data

CENTRA LINE by Honeywell

GENERAL

Cost-effective monitoring and control with GPRS.
The HAWK M2M is specifically designed for remote monitoring and control applications in smaller installations, particularly for retrofit to existing sites. It combines integrated control, alarming, data logging, scheduling, supervision, and network management functions in a compact wall-mounting package. In addition to wired Ethernet and serial ports, the device features 16 built-in I/O points, as well as a 230 V PSU and an (optional) GPRS modem. The included cable management features make this a stand-alone device, reducing installation time and cost. The HAWK M2M makes it possible to control and manage external devices over the Internet and present real-time information to users in web-based graphical views.

FEATURES

- **Small, compact wall-mount design with cable management is easy to install**
- **Embedded Power PC platform @ 250 MHz running Niagara Framework**
- **Web User interface serves rich presentations and live data to a browser**
- **RS 232 and RS 485 communication ports**
- **Plug in communications card option slot**
- **Universal Mains built-in power supply**
- **Onboard 16 points of I/O**
- **Optional GPRS Modem for remote internet access and alarm monitoring**
- **Supports open communication networks; LON, BACnet, EIB-IP, Modbus, M-bus, SNMP, Z-wave, oBIX**
- **Full network management of LONworks devices**
- **Built-in Web Server provides Graphical User Interface via Browser**
- **Different versions match different types and sizes of application**

ENGINEERING

The Graphical Engineering Tool (COACH^{AX}) is embedded in the HAWK, thus allowing it to be engineered from an Internet browser without using any additional software at the PC. (Only the first commissioning of the HAWK must be done by a PC on which COACH^{AX} has been installed.)

CONNECTIVITY

HAWK features two Ethernet ports plus one RS 232 port and one RS 485 port as a standard.

2 Ethernet ports	10/100 MB, RJ-45 connections
1 RS232 port	9-pin D-connector
1 RS485 port	3-way, two-part connector
GPRS modem	is a factory installed option

PLUG-IN CARDS

The communication capability can be extended by adding plug-in cards into the unit's expansion slot. The following Plug-In Cards are available:

CLAXHAWKIFLON	FTT-10A LONWORKS port
CLAXHAWKIF485	2 x RS485 ports
CLAXHAWKIF232	RS232 port

APPLICATIONS

The HAWK M2M is ideal for a wide range of applications. 16 on-board inputs and outputs are included for applications where local control is required, with additional I/O or third party devices connected via the serial and IP ports.

In small facility applications, the HAWK M2M is all you need for a complete system; the HAWK M2M serves data and rich graphical displays to a standard web browser via an Ethernet LAN or remotely over the Internet, or via the optional built-in GPRS modem.

In larger facilities, multi-building applications, and large-scale control system integrations, ARENA AX can be used to aggregate information (real-time data, history, alarms, etc.) from large numbers of HAWKs into a single unified application. The ARENA AX can manage global control functions, support data passing over multiple networks, connect to enterprise level software applications, and host multiple, simultaneous client workstations connected over the local network, the Internet, or GPRS modems.

CE

SPECIFICATIONS

IBM PowerPC processor 405EP 250 MHz
DRAM 128 MB
Serial Flash 64 MB
Battery back-up 5 minutes typical

- shut down begins within 10 sec

Data base storage and real-time clock

- 3 month battery back-up

Operating System

- QNX Operating System
- IBM J9 Java Virtual Machine
- Niagara^{AX} Framework® 3.4.51 or later

Integrated Inputs and Outputs

- 8 universal inputs
- 4 digital (relay) outputs
- 4 analog (0-10V) outputs

All I/O terminals via removable two part screw terminals for ease of installation

Universal Inputs (UI) for:

- Type 3 (10K) Thermistors, input accuracy +/-1% of span
- Other types may be supported by entering custom non-linear curve interpolation points for each nonlinear input
- 0-10 Vdc +/- 2% of span without user-calibration
- 0-20 mA +/- 2% of span, without user-calibration. Uses externally connected resistor for current input (provided). Self-powered or board-powered sensors accepted.
- Dry contact V open circuit, 300-µA short-circuit current Pulsing dry contact up to 20 Hz; 50% duty cycle

Digital Outputs (DO):

Form A relay contacts max. 24 Vac or dc, 0.5 A max. current; suitable for on/off control only; floating control not supported.

Analog Outputs (AO)

0…10 Vdc 4 mA drain max.

Power Supply

90…240 Vac, 50/60 Hz universal PSU

Housing

Construction: Plastic, screw-mount housing, plastic cover.
Cooling: Internal air convection wiring access holes provided at top and bottom of housing and via knockouts on base for hidden wiring.

Environment

Operating temperature range: 0 to 50°C
Storage Temperature range: 0 to 70°C
Relative humidity: 5 to 95%, non-condensing
Enclosure rating: IP40 – designed for indoor spaces

COMMUNICATION DRIVERS

Included Drivers

BACnet	IP, MSTP
LONWORKS	req. LON interf. card (CLAXHAWKIFLON)
EIB / KNX	IP
M-Bus	via RS232 and M-Bus Master
Modbus	Async, Slave, TCP, TCP Slave
Z-Wave	wireless communication standard
oBIX	Open Building Information Xchange
SNMP	Simple Network Management Protocol

Additional Drivers

CLAXDRHLV	Helvar driver, DALI
CLAXDRHRSM	driver for Hortsmann meters
CLAXDRSMS	SMS Service for HAWK via GSM/GPRS modem

ORDERING

The Web User Interface, the engineering software COACH^{AX}, and the most common open drivers (includes drivers) are included to the HAWK. The different versions of the HAWK are differentiated by the Java Heap Memory (JHM) and the available Resource Units (RU). The JHM and the RU needed by a given application depend upon the number of connected networks, the complexity of the logic and of the GUIs, the number of points, the histories, and the alarms. These numbers can be estimated by the Resource Estimator, which is part of COACH^{AX}.

No GPRS	With GPRS	description
CLAXHAWK256M	**CLAXHAWK256MGP**	48 MB Java Heap No license restriction
CLAXHAWK246M	**CLAXHAWK256MGP**	16 MB Java Heap No license restriction
CLAXHAWK236M	**CLAXHAWK256MGP**	16 MB Java Heap 450 KRU Limit Drivers limited to 200 pts
CLAXHAWK216M	**CLAXHAWK256MGP**	16 MB Java Heap 350KRU limit Drivers limited to 8 devices

Manufactured for and on behalf of the Environmental and Combustion Controls Division of Honeywell Technologies Sàrl, Rolle, Z.A. La Pièce 16, Switzerland by its Authorized Representative:

CentraLine
Honeywell GmbH
Böblinger Strasse 17
71101 Schönaich, Germany
phone: +49 7031 637 845
fax: +49 7031 637 846
info@centraline.com
www.centraline.com

CentraLine
Honeywell Control Systems Ltd.
Arlington Business Park
UK-Bracknell, Berkshire RG12 1EB
phone: +44 13 44 656 565
fax: +44 13 44 656 563
info-uk@centraline.com
www.centraline.com

Printed in Germany.
Subject to change without notice.
EN0Z-0961GE51 R0110

CENTRA LINE by Honeywell