



Armstrong SteamEye® Gateway M 3000/4000 Series

Figure 1
Armstrong SteamEye Gateway M



Product Overview

The Armstrong Gateway M runs on a Linux based Cherokee SSL web server which collects data from up to 2000 wireless SteamEye transmitters. The data is stored using a flash memory drive. The unit requires 120v AC power supply, is self contained, has no moving parts and is designed to operate in industrial environments. Data is accessed using a standard web browser with password authorization to the device.

The SteamEye Gateway can be integrated with Armstrong's SteamStar™, a web based steam trap measurement platform, as part of a comprehensive Best Practices Steam Trap Management Solution.

Integration and Security

The Gateway M can be configured on a LAN and will use the data interface shown in Figure 2. The unit has a built in security certificate signed by Armstrong but can accept a user customized certificate. Telenet and FTP ports can be turned off for added device security; however, if SteamStar communication is desired an outbound port must be allowed. The unit can also be integrated with Building Automation System (BAS) or Digital Control System (DCS) systems using a built-in ModBus RTU table.

Figure 2

Tx#	Tag#	Location	Type	Model No.	Status	Battery	Radio	# State Changes	Last Report	Previous Report - State	Cycle Count
20000	20006	Plant 1 Tests-4-US North-West Bay Pump Trap #1	Pump Trap w/ Cycle Count	ARM / PUMP TRAP	LOS	OK	2	804	Thu Sep 28 14:05:26 EST 2006	Wed Sep 27 13:46:41 EST 2006 - FL	9925
20002	20007	Lab	Sump Ejector	ARM / Sump Ejector	OK	OK	1	5315	Wed Nov 29 13:34:50 EST 2006	Wed Nov 29 13:34:50 EST 2006 - FL	N/A
20008	20008	Plant 1 Tests-4-US North-West Bay Pump Trap #2	Pump Trap w/ Cycle Count	ARM / PUMP TRAP	OK	OK	1	1173	Wed Nov 29 13:44:05 EST 2006	Thu Oct 19 13:34:42 EST 2006 - LOS	14325
986720	30	Lab CB-4 Drip Trap Tag # 13-2	Steam Trap	ARM / 2011	OK	OK	58	37	Wed Nov 29 13:46:13 EST 2006	Sat Nov 25 06:04:40 EST 2006 - CD	N/A
986727	986727	Lab	Steam Trap	ARM / FT4000	CD	OK	13	35	Wed Nov 29 13:46:41 EST 2006	Tue Nov 21 09:40:52 EST 2006 - OK	N/A

All dimensions and weights are approximate. Use certified print for exact dimensions. Design and materials are subject to change without notice.

Steam Trap Failure Alarms

The Gateway M has several alarm options. The device can communicate with an email server to page or email up to three (3) people when critically monitored equipment fails. The other alarm option is provided by external alarm relay contacts. This options allows for connection to a visual or audio alarm.

Allowing Armstrong remote access to the web server is recommended but not mandatory. Remote access is used for administration purposes only and Armstrong is willing to sign a confidentiality agreement when necessary. If remote access is allowed, an internet accessible TCP/IP address or a VPN assigned to the SteamEye device is required.

Product Specifications

Model	Armstrong SteamEye Gateway M
Operating System	Linux, AMD low power LX800 500MHz fanless processor, 128MB RAM, 2GB flash memory
Ethernet Interface	1 X 10/100mbps
Network Protocols Supported	IPv4, IPv6, SMTP, FTP, Telnet, SSH, HTTP, HTTPS
Inbound TCP/IP ports: Embedded web server Remote configuration Remote software upgrades	80 standard (redirected to 443) 23 (Telnet) 21 (FTP) 443 (HTTPS configurable) 22 (SSH configurable)
Outbound TCP/IP ports: For e-mail/pager/text message notification For SteamStar updates	25 (send mail to SMTP server) 80 (HTTP)
RF Receiver	1 Internal RF Receiver 1 External Receiver Port
Dimensions (H x W x D)	2-3/4" x 6-17/32" x 4-15/32" (70 mm x 166 mm x 114 mm)
Weight	3.5 lb (1.6 kg)
Operating Temperature Range	32°-140°F (0°-60°C)
Operating Humidity	10% - 70% Relative humidity, non-condensing
BAS/DCS Connection	RS-232 or RS-485 (configurable) ModBus RTU slave
External Alarm Contacts	Input voltage to relay 12-50 VDC Normal Switch Capacity 1.5A @ 30 VDC