Woodhead GATEway is configurable stand-alone smart Ethernet TCP/IP, Profibus and Serial gateway that allows based controllers to communicate and to interoperate simultaneously with each other.

GATEway

Ethernet ↔ Ethernet / Serial
Profibus ↔ Ethernet / Serial

Features

- **Manages simultaneously up to:**
  - ✓ **10 Industrial Ethernet TCP/IP protocols (running both Client and Server modes)**
  - ✓ **4 Profibus protocols Client and Master/Slave modes**
  - ✓ **6 Serial protocols Master and Slave**

- **No programming, just configuring. Doesn't require protocol knowledge**

- **Real-Time data exchange through internal data base (32 Kbits + 32 Kwords)**

- **Typical architectures: Data translator, Data concentrator, Industrial firewall**

- **Supports unsolicited data exchange from Client devices**

- **Up to 128 PLCs on Ethernet TCP and 126 Profibus devices**

- **Powerful graphical tools to diagnose Network, Devices and Process Data**

- **Desktop or DIN Rail mounting**

- **Automatic detection of Profibus-DP devices**

- **Upload/Download configuration and diagnostic through Remote TCP/IP**

Typical applications

- **Industrial Networking Solutions**
  - **Open SCADA connectivity**
  - **Integration of different networks/manufacturers**
  - **Integration of legacy devices into new Ethernet or Profibus architectures**
- **Machine Tool Industry**
  - **Simple adaptation of Serial device**
  - **Easy access to different PLC systems by using just one hardware platform**
- **Building Automation**
  - **Multiple gateways for Alarm Center application**
 - **Integration of legacy devices**
- **...**

Woodhead GATEway is more than a standard tunnelling gateway! It is the first hardware platform that allows **simultaneous communication** between industrial devices (PLC, SCADA etc.) using **up to 20 different Ethernet, Profibus and Serial protocols**.

Open on the major industrial manufacturer vendors, the Woodhead GATEway supports multi-messaging that enables it to communicate and interoperate as the following modes simultaneously:

- ✓ **Multi Ethernet TCP/IP ↔ Multi Ethernet TCP/IP** (same and different protocols)
  - → for example: Siemens S7 TCP ↔ Schneider Uni-TE TCP Premium
    Omron FINS TCP ↔ Modbus TCP
    Siemens S5 TCP ↔ GE SRTP TCP
- ✓ **Multi Profibus ↔ Multi Profibus** (same and different protocols)
  - → for example: Profibus Siemens S7 ↔ Profibus Siemens S5
    Profibus DPV0 Master ↔ Profibus Siemens S7
    Profibus DPV0 Slave ↔ Profibus DPV0 Slave
- ✓ **Multi Profibus ↔ Multi Ethernet TCP/IP** (same and different protocols)
  - → for example: Profibus Siemens S7 ↔ Schneider Uni-TE TCP Premium
    Profibus DPV0 Master ↔ Modbus TCP
    Profibus Siemens S5 ↔ GE SRTP TCP
- ✓ **Multi Profibus ↔ Mono Serial** networks
  - → for example: Siemens S5 TCP ↔ Serial Modbus Slave ASCII
    Siemens S7 TCP ↔ Serial GE SNP-X Master
- ✓ **Multi Ethernet TCP/IP ↔ Mono Serial** networks
  - → for example: Siemens S5 TCP ↔ Serial Modbus Slave ASCII
    Siemens S7 TCP ↔ Serial GE SNP-X Master
- ✓ **Serial ↔ Serial** network (same protocol)
  - → for example: Serial Modbus Slave ↔ Serial Modbus Slave

The Woodhead GATEway embeds a powerful processor running a real-time OS kernel. Through its on-board Database (**32 Kbits / 32 Kwords**), the GATEway performs all communication tasks to exchange data between equipment by running automatic Read/Write cyclic functions and allows the receiving of unsolicited Read/Write requests. The R/W cyclic functions can also be activated by the use of the writing associated flags.
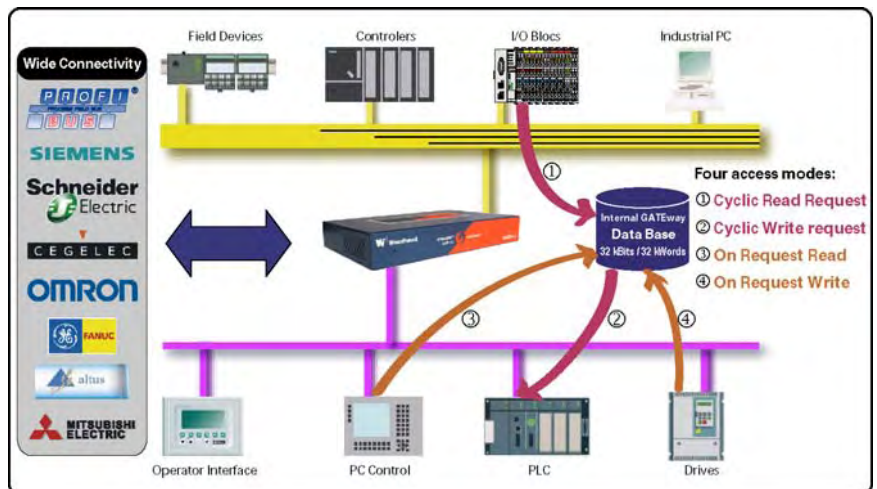
The Woodhead GATEway includes a software package running under Windows XP or 2000 environments enabling the GATEway to be setup using a remote TCP connection. The package includes a set of powerful tools to perform features such as:

- ✓ Ethernet, Profibus and Serial protocols configuration
- ✓ Cyclic functions setup and monitoring
- ✓ Graphical Network Diagnostic tools for Ethernet and Profibus
- ✓ Process data access utilities
- ✓ Upload/Download of GATEway data for extended Diagnostic

applicom

Protocols supported

Ethernet TCP/IP – Client and Server modes
▪ **Altus** - Alnet II (webgate & AL2000 series)   ▪ **Alstom** - SRTP (Alspa C80-35 & C80-75)   ▪ **GE Fanuc** - SRTP (GE90-30 & 90-70)   ▪ **Mitsubishi** - Melsec (AnA, AnU, AnS, QnA, QnAS)   ▪ **Omron** – Fins (Sysmac C, CV and CS1)   ▪ **Schneider** - Open Modbus (TCP and UDP)   ▪ **Schneider** - Uni-TE (Premium, Micro)   ▪ **Siemens** - Industrial Ethernet (S7-200/300/400, S5, TI-505)
Serial
▪ **GE Fanuc** - SNP-X Master (GE90-30/70)   ▪ **Schneider** - Modbus Master (ASCII & RTU)   ▪ **Schneider** - Modbus Slave (ASCII & RTU)   ▪ **Schneider** - Uni-Telway Slave Client/Server (TSX/PMX)   ▪ **Siemens** - AS511 Master (S5 console outlet)   ▪ **Siemens** - TI-Dir Master (TI-505 console outlet)
Profibus
▪ **Siemens** – S7/MPI Client   ▪ **Siemens** – S5 Client   ▪ **EN50170** – DPV0 Master/Slave Class 1 & 2

(1) Up to 128 PLCs on Ethernet TCP
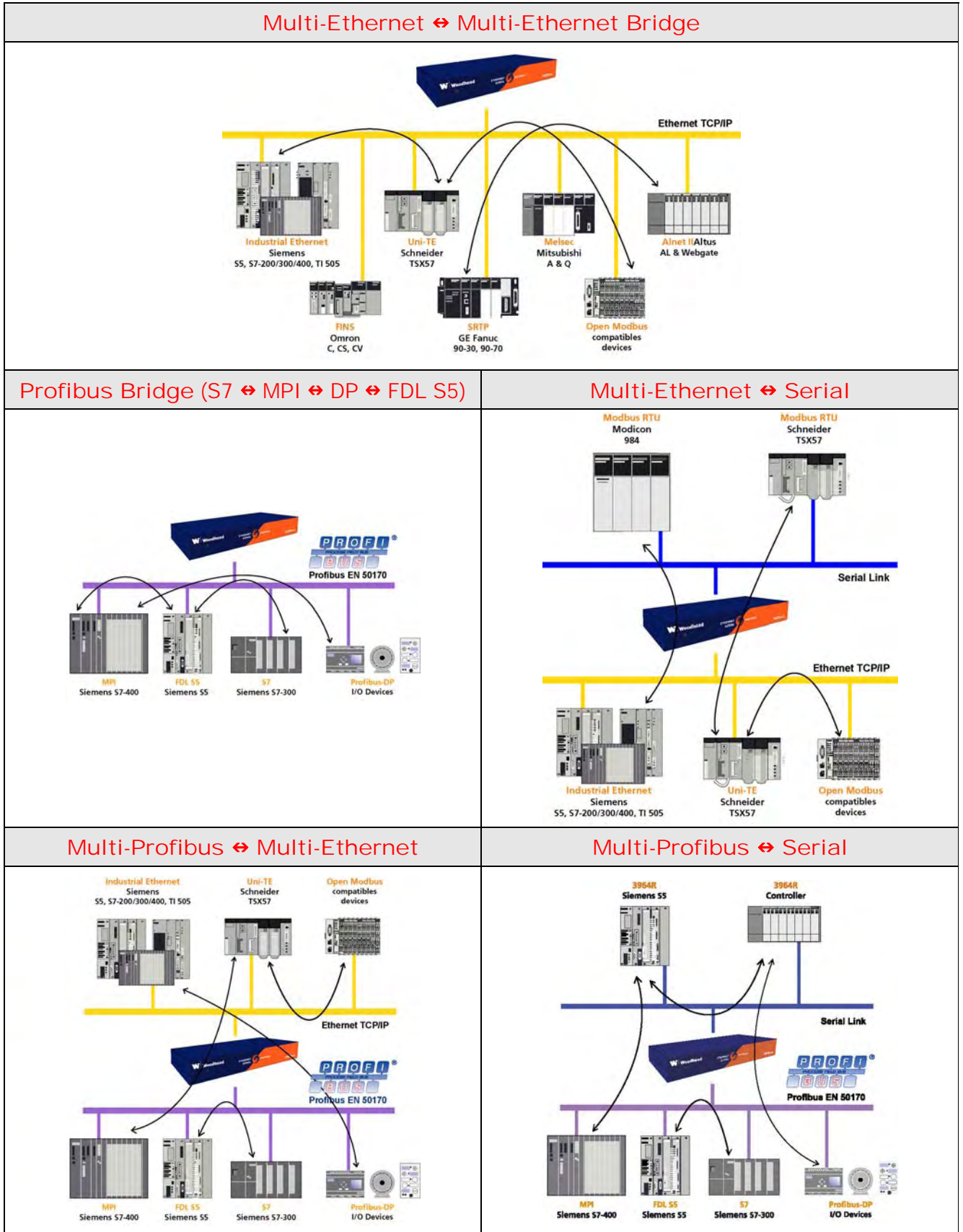(2) Up to 126 Profibus devices

Hardware Specifications

Physical characteristics	
Processor 32bit	ST Micro STPC Vega (equivalent to Pentium 200 Mhz within co-processor)
RAM	32 Mbytes
Flash Disk	32 Mbytes
Operating Voltage	+24V DC (+/- 20%) provided by external power supply (not included) Connector: Plug screw terminal 2 way
Consumption	12W
Ingress Protection	IP20, IP30 if RJ11 and RJ45 connected
Indicator (LED)	**Front panel:** 1 Mono-Color Yellow: Power on **Rear panel:** 2 Mono-color: Ethernet 10/100, Tx/Rx and Link
Weight	950g
Temperature	**Operating:** 0°C to +50°C (+32°F to 122°F) **Non-operating**: -55°C to +85°C (+14°F to 185°F)
Humidity (non-condensing)	90%
Ventilation	Natural. Minimum gap of 2 cm
MTBF	100 000 Hours
Dimensions (L x W x H) (without connector and foots)	220 x 140 x 35 mm (8.66 x 5.51 x 1.38 inches) - (1/2 19 inches 1U)
Box	Metal box Fixing: Set of 2 fixing clamps for wall mountable Set of 2 fixing clamps for DIN rail 35mm mountable
EMC compliance	EMI EN55022 Class B, EN55024
Communication Interfaces	
Serial port	1 x RS485/422 (2-wire or 4-wire) D-Sub Connector: 9-pin, Male Speed: 2400 bps up to 115.200 kbps
Ethernet port	10/100BaseT (RJ45), shielded IEEE 802.3
Profibus port	D-Sub Connector: 9-pin, Female, Galvanic isolation 500V Speed: 9600 bps up to 12 Mbps 2 Leds: BF: Bus Fault ST: Communication status

Gateway

Working modes supported

Yes, You can do it all together !..

Multi-Ethernet ↔ Multi-Ethernet Bridge

Profibus Bridge (S7 ↔ MPI ↔ DP ↔ FDL S5)	Multi-Ethernet ↔ Serial

Multi-Profibus ↔ Multi-Ethernet	Multi-Profibus ↔ Serial

Gateway

Distribución: **ER-SOFT, S.A.** Email: er@er-soft.com, Tel: +34 916 408 408

Software tools

The core of applicom® GATEway lies in effective software tools enabling fast integration of industrial communication into your applications.
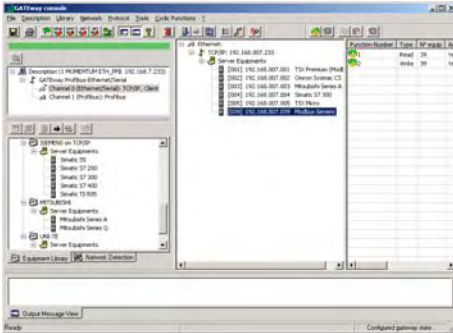
- GATEway setup Console -
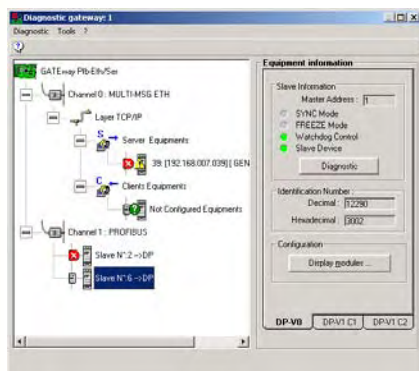
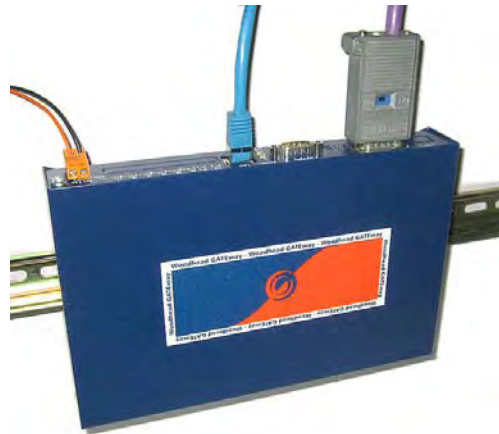

- Network Diagnostic Tool -
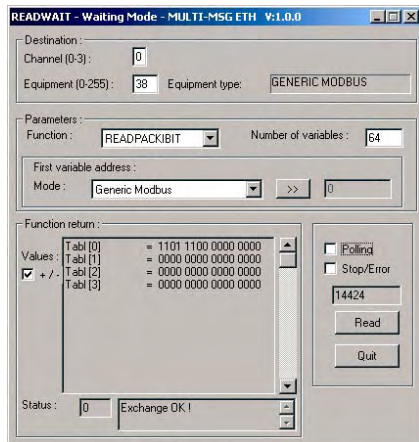
- Read Data Access utility -

Product Pictures

- GATEway Ethernet ↔ Serial back view -

- GATEway Profibus ↔ Ethernet/Serial back view -

- Rail DIN mount view -

Ordering Information

Part Number	Description
APP-ESR-GTW	applicom® GATEway Ethernet ↔ Serial
APP-ESP-GTW	applicom® GATEway Profibus ↔ Ethernet / Serial

Related products

Part Number	Description
DRL-2ASI-PFB	Gateway AS-I / Profibus, 2 Channels, Display, IP20
DRL-2ASI-CAN	Gateway AS-I / CANopen, 2 Channels, Display, IP20
DRL-2ASI-DV	Gateway AS-I / DeviceNet, 2 Channels, Display, IP20
DRL-2ASI-SER	Gateway AS-I / Serial Modbus, 2 Channels, Display, IP20
DRL-2ASI-ETH	Gateway AS-I / Ethernet Modbus TCP, 2 Channels, Display, IP20
APP-GTW-S4D	applicom® GT4010 Gateway, 4xRS485/422 Serial Channels, Modbus & Uni-Telway, desktop version
APP-GTW-S4R	applicom® GT4010 Gateway, 4xRS485/422 Serial Channels, Modbus & Uni-Telway, 19" 1U rackable version

Woodhead

Gateway

Distribución: **ER-SOFT, S.A.** Email: er@er-soft.com, Tel: +34 916 408 408