



22 Apr. 10  
DW200576

**BradCommunications™ applicom® GATEway is a configurable stand-alone Ethernet TCP/IP, PROFIBUS and Serial gateway that allow based controllers to communicate and to interoperate simultaneously with each other.**

## Features

- **NEW for version 1.4**
  - ✓ Embedded 6 Digital Inputs / 2 Digital Outputs
  - ✓ "COS feature" – Change of State mechanism for write request
  - ✓ Full management of Read/Write access through word status commands
- **Manages simultaneously up to:**
  - ✓ 10 Industrial Ethernet TCP/IP protocols (running both Client and Server modes)
  - ✓ 4 PROFIBUS protocols Client and Master/Slave modes
  - ✓ 7 Serial protocols Master and Slave
- **No programming, just configuring.**
- **Real-Time data exchange through internal database (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

## Multi-Networks GATEway

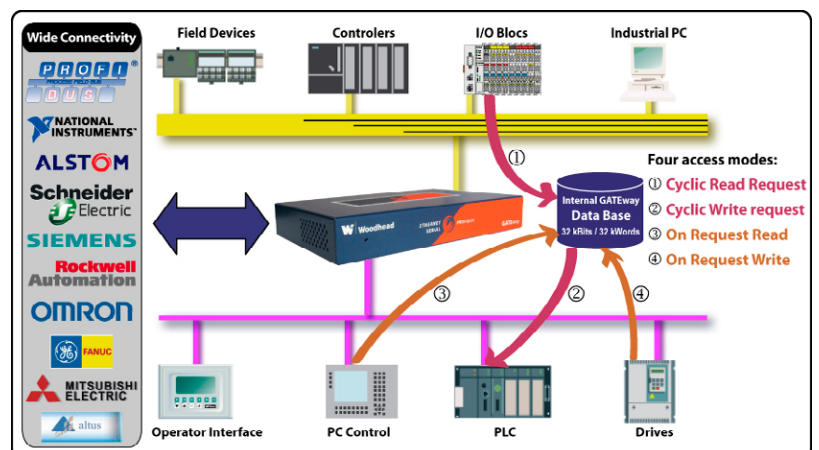
**Ethernet ↔ Ethernet / Serial**  
**PROFIBUS ↔ Ethernet / Serial**

The BradCommunications™ applicom® GATEway is more than a standard tunneling 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 for the major industrial manufacturers, the 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 ↔ PCCC Allen-Bradley ControlLogix
  - Siemens S5 TCP ↔ GE SRTCP
- ✓ **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 SRTCP
- ✓ **Multi PROFIBUS ↔ Mono Serial networks**
  - for example: Siemens S5 TCP ↔ Serial Modbus Slave ASCII
  - Siemens S7 TCP ↔ Serial DF1 Allen-Bradley SLC-500
- ✓ **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 BradCommunications applicom 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 GATEway includes a software package running under Windows XP or Windows 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 Diagnostics



## Protocols supported

### Ethernet TCP/IP<sup>(1)</sup> – Client and Server modes

- **Allen-Bradley** - EtherNet/IP PCCC (SLC 500, PLC-5 & ControlLogix)
- **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

- **Allen-Bradley** - DF1 (SLC 500, PLC-5 & ControlLogix)  
Full duplex Client/Server  
Half duplex Master/Client or Slave/Server
- **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<sup>(2)</sup> Client
- **Siemens** – S5<sup>(2)</sup> Client
- **EN50170** – DP-V0<sup>(3)</sup> Master/Slave Class 1 & 2

(1) - Up to 128 devices on Ethernet TCP

(2) - Up to 40 Simatic<sup>®</sup> S7 and S5 devices

(3) - Up to 126 PROFIBUS devices

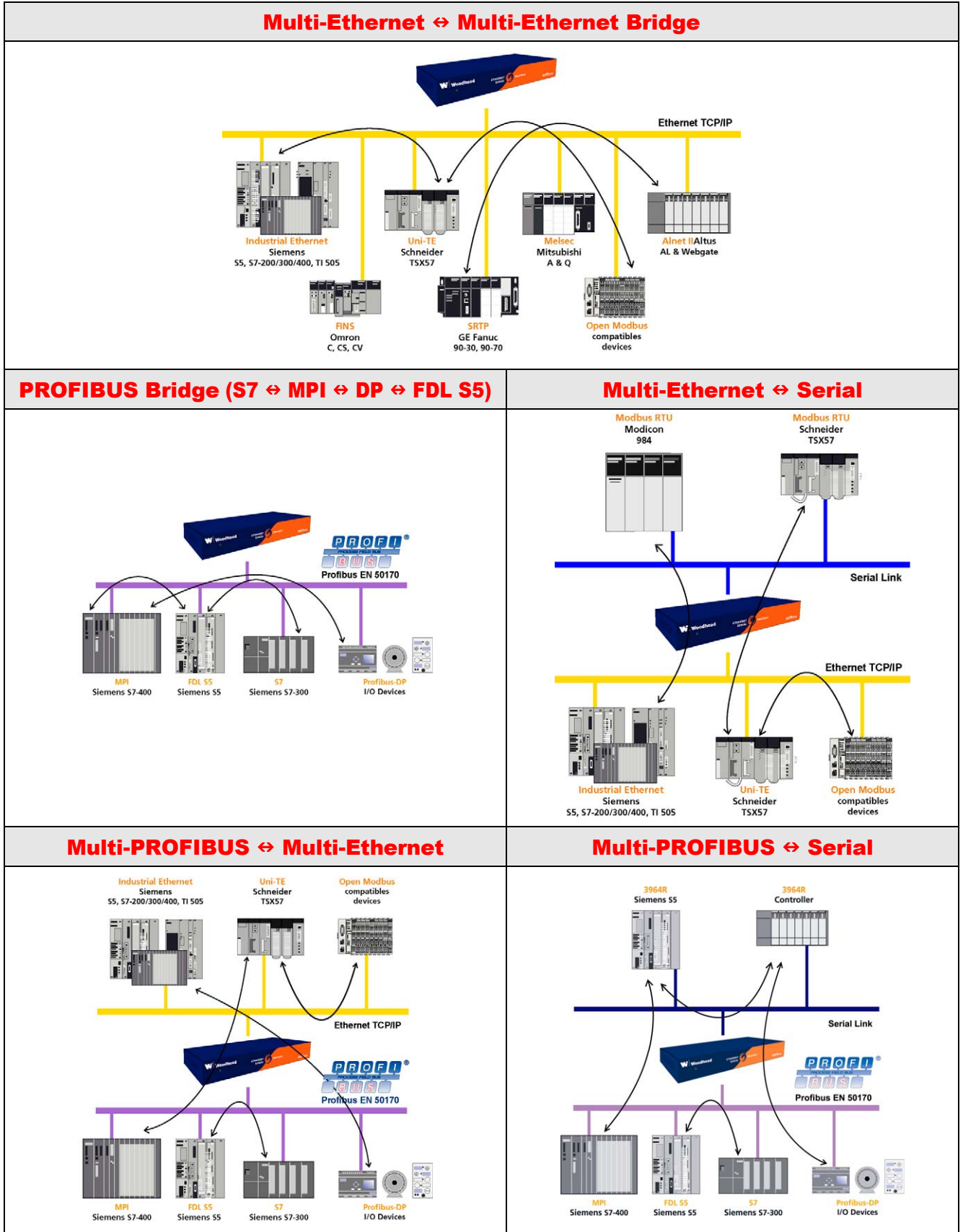
## Hardware Specifications

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)	<b>Front panel:</b> 1 Mono-Color Yellow: Power on <b>Rear panel:</b> 2 Mono-color: Ethernet 10/100, Tx/Rx and Link
Weight	950g
Temperature	<b>Operating:</b> 0°C to +50°C (+32°F to 122°F) <b>Non-operating:</b> -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 feet)	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 DIN rail 35mm mountable
Digital Input / Output	6 Digital Inputs / 2 Digital outputs – <b>NEW</b> Automatic or configurable mapping of I/O into GATEway database
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 Ethernet II
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

# Multi-Networks GATeWay



## Working modes supported



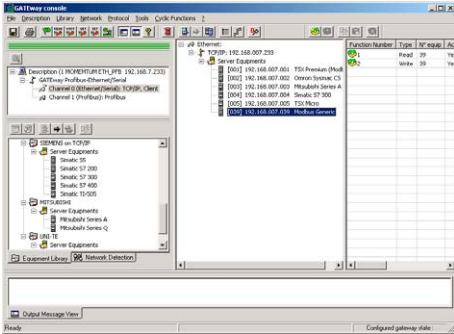
The architectures displayed here are not exhaustive.

# Multi-Networks GATEway

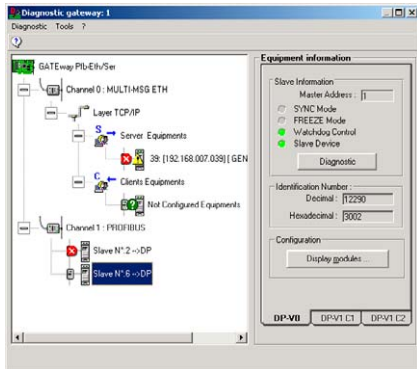


## Software tools

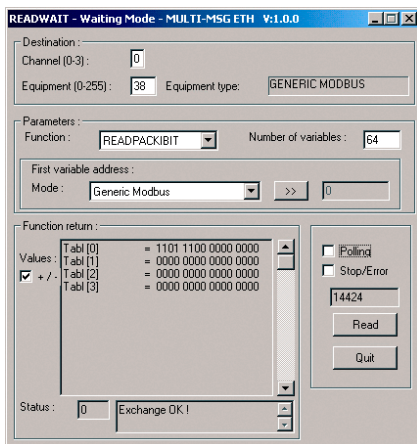
The core of the BradCommunications applicom GATEway lies in effective software tools enabling fast integration of industrial communication into your applications.



- GATEway setup Console -



- Network Diagnostic Tool -



- Read Data Access utility -

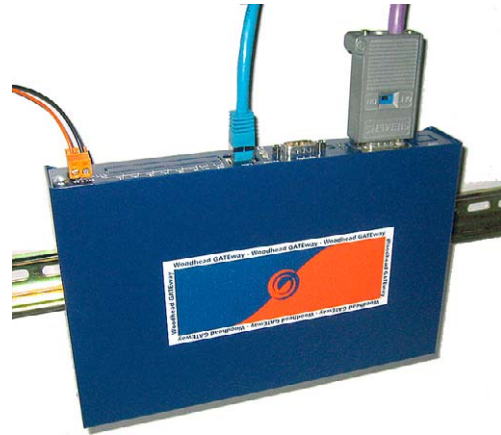
## Product Pictures



- BradCommunications applicom GATEway Ethernet ↔ Serial back view -



- BradCommunications applicom GATEway PROFIBUS ↔ Ethernet/Serial back view -



- DIN Rail mount view -

## Ordering Information

Part Number	SAP	Description
APP-ESR-GTW	1120340002	BradCommunications™ applicom® GATEway Ethernet ↔ Serial
APP-ESP-GTW	1120340001	BradCommunications™ applicom® GATEway PROFIBUS ↔ Ethernet / Serial

## Related products

Part Number	SAP	Description
APP-GTW-S4D	1120340003	BradCommunications™ applicom® GT4010 Gateway, 4xRS485/422 Serial Channels, Modbus & Uni-Telway, desktop version
APP-GTW-S4R	1120340004	BradCommunications™ applicom® GT4010 Gateway, 4xRS485/422 Serial Channels, Modbus & Uni-Telway, 19" 1U rackable version

To contact us: [www.woodhead.com](http://www.woodhead.com)

North America: US: +1 (630) 969-4550 – Canada: +1 519 725 5136

Europe: France: +33 2 32 96 04 20 – Germany: +49 7252 94 96 0 – Italy: +39 (02) 950551 – UK: +44 (1252) 720720

Asia: China: +86 21-5048-0889 Singapore: +65 6-268-6868 – Japan: +81 46-265-2325 – Korea: +82 31-492-9000

Brad is a registered trademark and BradControl, BradCommunications, applicom, Direct-Link and SST are trademarks of Molex Incorporated. © 2010 Molex