

Easy access to Serial and Profibus networks, via the LAN or Internet, it's just "Plug & Play".

The application software is all on the webGATE, any Web based device can become the control console.

22 Dec. 06 DW200459

### **Features**

- Monitors and Controls your Serial/Profibus devices using a standard Web browser
- Manages alarms and status information to remote service centers (email, SMS, IPcallback) for monitoring
- Performs specified local data logging for recording
- Secured access according to 3 user levels
- Open to customization
  - Develop and embed "custom tasks" to execute specific treatments
  - Develop HTML Web pages to create HMI interface
  - New! thinHMI software to develop advanced full web synoptics, animated in real-time, without any specific skills!

### Typical applications

- Remote Measure / Metering
  - Building management
  - Local authorities
  - Water, gas & electricity
- Level Control
  - Gas & liquid distribution
  - Reservoir & tank content ordering
  - Content level supervision
- Simple Building Automation
  - Local authorities
  - Small hospitals/clinics
  - Small & Medium Enterprise
  - Shops
- Customized User Interface

## webGATE

### **Web Remote Gateway**



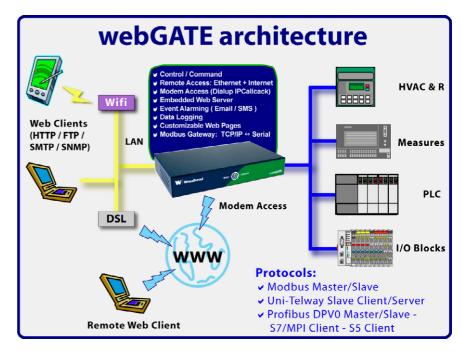
### BradCommunications webGATE is a

"customizable" Web enabled gateway providing

both local and remote monitoring services for **Serial** and **Profibus** connected devices. The gateway creates the connection from your industrial installations to LAN based networks.

The webGATE hardware platform is an extremely compact board-only server housed in a compact and easy to install enclosure. Designed as an "always on" device, network connectivity is facilitated with the Serial/Profibus installations.

The webGATE offers a revolutionary simple approach to network control installations. The software architecture is based on a centralized database structure. The devices controlled by the webGATE are configured by a simple Web based interface. Once a device has been added to the database definition, all of the different networking services are running and it is automatically available in all of the menus.



### **Built-in Web Server**

Each webGATE contains a built-in Web server that allows easy access to the status and control information related to the devices connected. Since 100% of the server application is running on the webGATE, the client terminal can be located anywhere as long as it supports a standard Web browser.

### **Remote Access**

In addition to integrated LAN based connection, webGATE provides an innovative IPCallback mechanism, which makes possible to contact internationally remote installations at the same cost of a local telephone call.

This mechanism can be used to initiate a connection to remote webGATE or to be contact by a remote webGATE when for example an alarm occurs or a log file is full.

# webGATE



### Open to customization

### 1 - Web pages

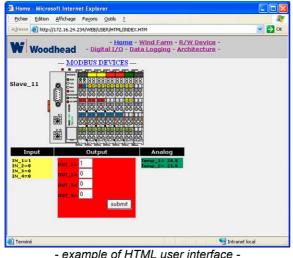
Thanks to the web server embedded in the webGATE, it is possible to watch the production behavior from remote, by using any standard web browser interface. Using the built-in 32 Mbytes Flash Disk, you have the possibility to develop and store your own personalized Web pages for real-time access to process variables.

### 2 methods available:

### By developing your own source code

The webGATE standard package allows you to develop customized user interfaces. This means that you can create your own Web site from scratch by using your preferred Web development tools.

To display webGATE information (process variable, alarms, I/O digital status, etc), we provide a set of tags compatible with HTML and JavaScript languages.

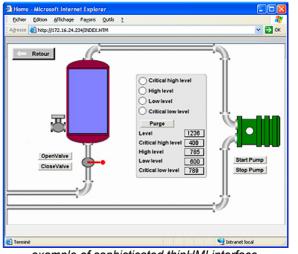


- example of HTML user interface -

### By using thinHMI software (web-based HMI design tool)

When the web pages contain entire synoptics with various objects and animations, their design becomes extremely complex. With thinHMI, a complete design environment, you can now build such animated HMI pages within minutes, without any specific web skills.

By offering intuitive menus, configurable animations and object libraries, thinHMI makes design of complete synoptics easy and straightforward. Cutting short on delays and development costs, thinHMI empowers every webGATE project owner to design and manage one's own customized screens and applications.



example of sophisticated thinHMI interface –

### 2 - Specific user tasks

Also available, the webGATE can embed "custom tasks" generally used to execute specific treatments such as: management of timers/counters, sophisticated calculus, automatic data collection, protocol implementation, etc.

Because the webGATE is based on a Windows compatible real-time OS, these custom tasks are Win32 DLL that you can easily develop through language like C or if you prefer Woodhead can do it for you with additional services.

# Gateway

# webGATE



### **Technical Specifications**

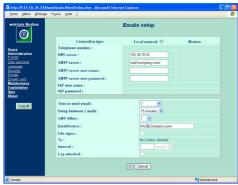
| Physical characteristics |  |  |
|--------------------------|--|--|
| Processor 32bit          | ST Micro STPC Vega (equivalent to Pentium 200 Mhz within co-processor)   |  |
| RAM                      | 32 Mbytes  |  |
| Flash Disk               | 32 Mbytes  |  |
| Operating Voltage        | +24V DC (+/- 20%) provided by external power supply (not included)<br>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              | <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                 | 90% non-condensing   |  |
| Ventilation              | Natural. Minimum gap of 2 cm   |  |
| MTBF                     | 100 000 Hours  |  |
| Dimensions (L x W x H)   | 220 x 140 x 35 mm (8.66 x 5.51 x 1.38 inches) - (1/2 19 inches 1U) (without connector and foots)   |  |
| Box                      | Metal box fixing: 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)<br>D-Sub Connector: 9-pin, Male<br>Speed: 2400 bps up to 115.200 kbps   |  |
| Ethernet port            | 1 x 10/100BaseT (RJ45), shielded - IEEE 802.3<br>Modbus TCP gateway feature : TCP/IP ↔ Serial  |  |
| Profibus port            | D-Sub Connector: 9-pin, Female, Galvanic isolation 500V<br>Speed: 9600 bps up to 12 Mbps<br>2 Leds: BF (Bus Fault) – ST (Communication status)                           |  |
| System software          |  |  |
| Real Time OS             | Core software (kernel, TCP/IP stack, etc)  |  |
| IP Services              |  |  |
| Web server               | HTTP 1.0 / Dynamic page creation on-the-fly to view equipment status   |  |
| FTP server               | Enables remote software updates and configuration changes (download and upload capable)  |  |
| SMTP client              | Sending of mails based on scenario and alarm   |  |
| Interface/administration |  |  |
| Scenario engine          | It's the core module of the intelligence logic. From a pre-defined event (date, external incident, HTTP request etc), a pre-programmed series of actions can be launched |  |
| Security                 | Password protection (3 levels possible)  |  |
| Network                  | On-the-fly address set-up & configuration  |  |
| Parameters               | Equipment set-up, thresh-hold settings etc.  |  |

# webGATE

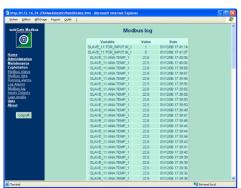
### **Screenshots**



– Device frame Setup –



- Emails Setup -



- Log information -



– Digital I/O status –

### **Product Pictures**



- webGATE front view -



- webGATE back view -

### **Protocols supported**

|                     | Modbus RTU Master/Slave  |
|---------------------|--|
| Serial              | Uni-Telway Slave Client/Server   |
| Profibus            | <ul> <li>Siemens S7/MPI<sup>(1)</sup> Client</li> <li>Siemens S5<sup>(1)</sup> Client</li> <li>DP-V0 Master Class 2 &amp; DP-V0 Slave (simultaneously)</li> <li>DP-V0 Slave</li> </ul> |
| (1) – Maximum of 40 | Simatic <sup>®</sup> S7 and S5 devices supported simultaneously.   |

### **Ordering Information**

| Part No.        | Description   |
|-----------------|---|
| APP-WEB-SER-M   | applicom® webGATE, Internet to Serial, integrated modem   |
| APP-WEB-SER-MTH | modem, Ready for thinHMI <sup>(1)</sup>   |
| APP-WEB-PFB-M   | applicom <sup>®</sup> webGATE, Internet to Profibus or Serial, integrated modem                                   |
| APP-WEB-PFB-MTH | applicom <sup>®</sup> webGATE, Internet to Profibus or Serial, integrated modem, Ready for thinHMI <sup>(1)</sup> |
| APP-WEB-TH      | thinHMI <sup>(1)</sup> software (project builder) for webGATE   |
| APP-UPG-TH      | thinHMI <sup>(1)</sup> upgrade for applicom <sup>®</sup> webGATE Serial or<br>Profibus                            |

(1): thinHMI is complete design environment developed by anyware Technologies.

For product and technical information,

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