

FS-8705-35 – SmarteBuilding Gateway and SmarteBuilding Driver

DATASHEET – Rev 1

DESCRIPTION

In this document we describe the gateway interface developed to provide a gateway to SmarteBuilding products allowing for easy integration into Building and Industrial Automation Systems using protocols like BACnet and Modbus.

Gateway

The gateway consists of

- A Physical Device eg. FSB3510-Series or FS-QS-Series
- Firmware

Firmware Consists of

- Protocol Driver for SmarteBuilding
- Protocol Driver (other eg Modbus) (More than 1 can be linked)
- Gateway Engine (connects the 2 protocols. Provides all the gateway functionality.)

Therefore, complete documentation of the delivered product consists of

1. Manual for SmarteBuilding Driver – connections, settings, trouble shooting
2. Manual for Physical Gateway – Install, power, trouble shooting
3. Manual for Gateway Configuration and Software tools – How to configure the gateway
4. Manual for 'other' protocol. Such as Modbus

The SmarteBuilding protocol driver is capable of being linked with other FieldServer drivers to form regular FieldServer firmware that can be installed on QuickServer and other FieldServer gateways.

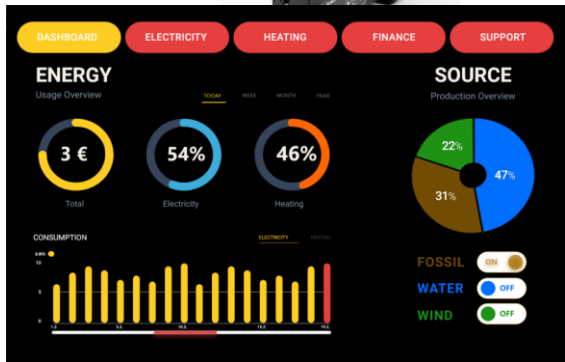
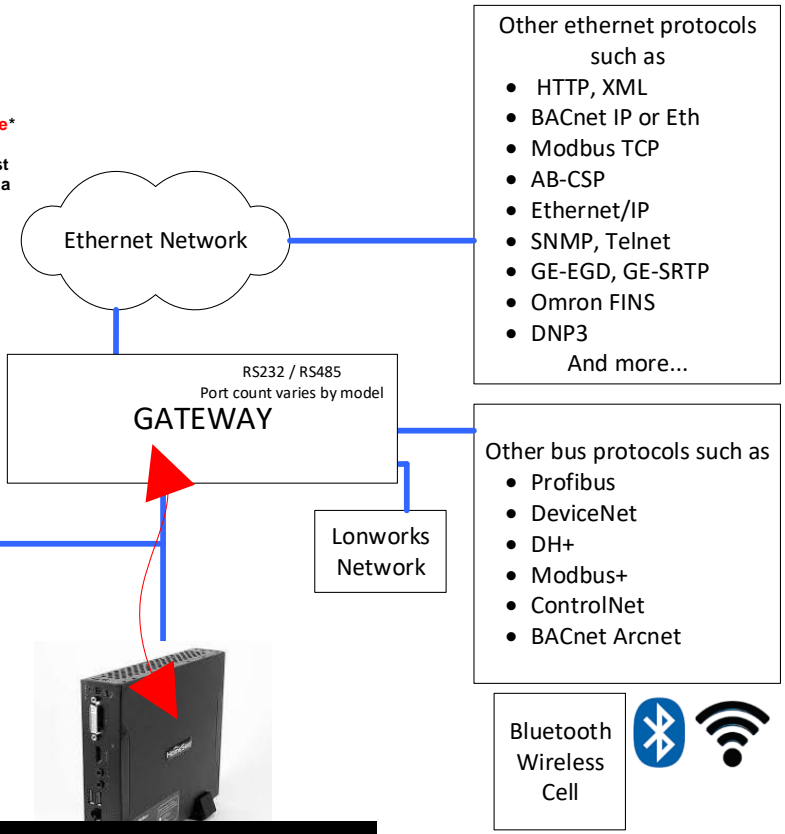


TYPICAL BLOCK DIAGRAM

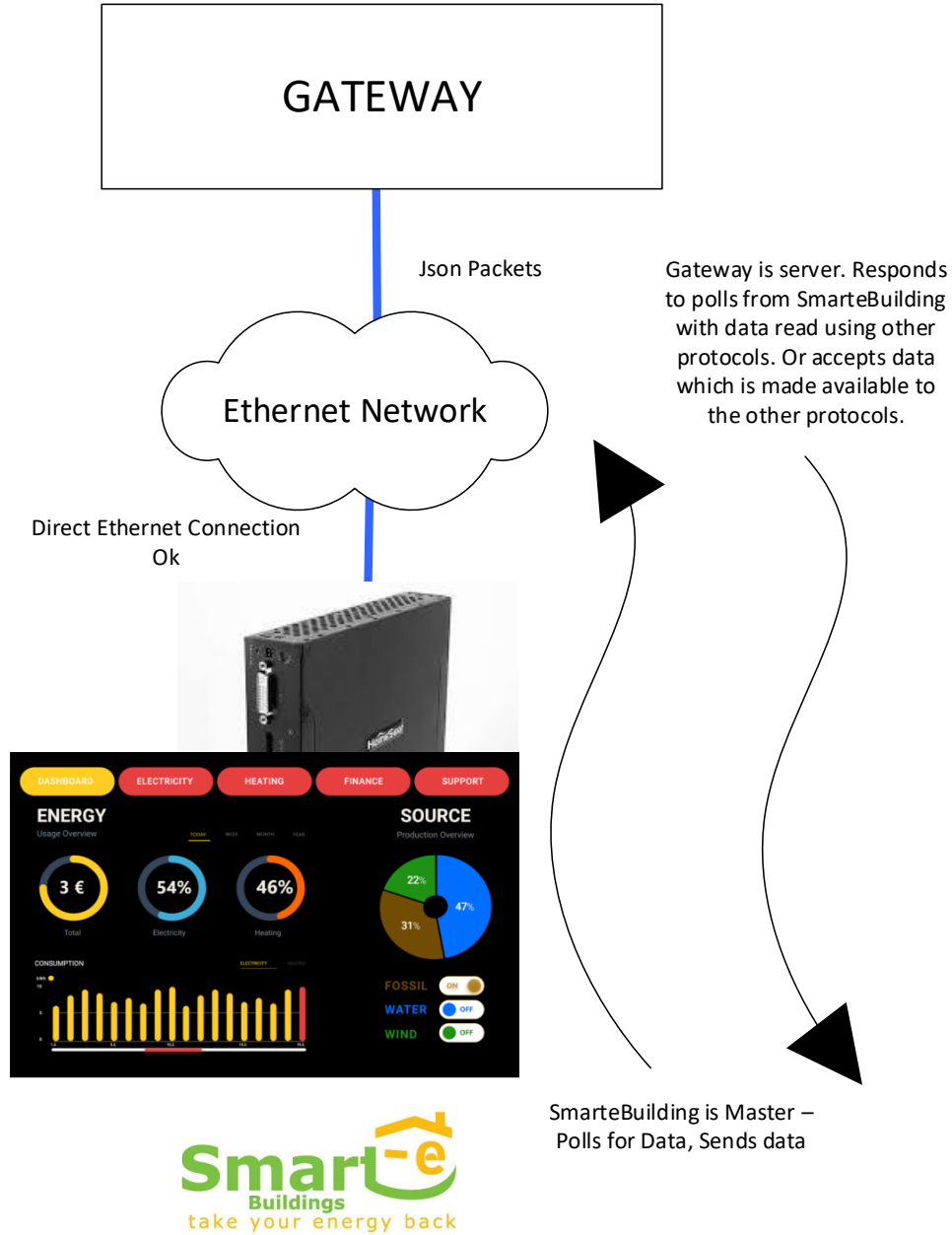
Free BACnet test software with purchase*

Confidently test the BACnet interface. Discover devices and their objects. Test and document them. Arm yourself with a powerful field tool. Full license.

- Other serial protocols such as
- Bacnet MSTP
 - Modbus RTU, ASCII, and other flavors
 - Rockwell DF1
 - GE-SNP
 - JCI Metasys N2
 - And more...
- Over 120 Protocols
We are always adding and can add yours.



CLIENT SERVER MODEL & DATA FLOW



JSON PROTOCOL FOR SMARTEBUILDINGS

Read Data from Gateway

Name is the name of a data element inside the gateway.

```
{
  "read" : {
    "name" : "DataFile1",
    "offset" : "0",
    "qty" : "10"
  }
}

{
  "readresponse" : {
    "name" : "DataFile1",
    "offset" : "0",
    "qty" : "10",
    "data" : "1.0 , 2.0 , 3 , 4 ,5 , 6.01 , 7 , 8 , 9 , 10 " ,
    "reliability" : "ok, ok, ok, ok, ok, ok, ok, ok, unreliable , ok "
  }
}
```

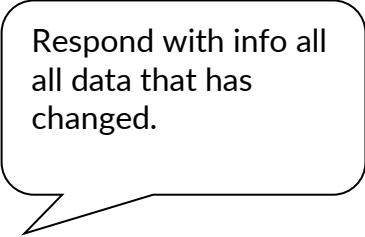
Write Data to Gateway

```
{
  "write" : {
    "name" : "DataFile1",
    "offset" : "0",
    "qty" : "2",
    "data" : "1.0 , 2.0"
  }
}

{
  "writeresponse" : {
    "name" : "DataFile1",
    "offset" : "0",
    "qty" : "10",
    "result" : "ok"
  }
}
```

Check for any changes

```
{
  "poller" : {
  }
}
{
  "pollerresponse" : {
    "name" : "DataFile1" ,
    "offset" : "0" ,
    "qty" : "10" ,
    "data" : "1.0 , 2.0 , 3 , 4 , 5 , 6.01 , 7 , 8 , 9 , 10 " ,
    "reliability" : "ok, ok, ok, ok, ok, ok, ok, ok, unreliable , ok "
  }
}
```



Respond with info all
all data that has
changed.

CUSTOMER SUPPORT

SmarteBuilding Driver for FieldServer was developed by Chipkin, and we are proud to provide support for our products. For technical support, sales and customer service, please call us at 1 (866) 383-1657.

Thanks for choosing Chipkin's products and integration services to meet your building and industrial automation requirements!

Chipkin™ is a building and industrial automation protocol expert. We develop, configure, install and support gateways (protocol converters), data loggers and remote monitor and controlling applications. Founded in October 2000, Chipkin provides expert solutions for converting BACnet®, Modbus®, and LonWorks®—to name just a few—and enabling interfaces for HVAC, fire, siren, intercom, lighting, transportation and fuel systems. The high-quality products we offer (including those from other vendors) interface with Simplex™, Notifier™, McQuay™, GE™ and many others—so you can rest assured that we will select the most appropriate solution for your application.

With Chipkin you are buying a solution. Our configuration expertise in this field combined with free BACnet and other tools ensure your success; and our customer support via phone, email and remote desktop tools means that we are there when you need us. Chipkin is a small responsive company, and we live or die by the quality of our service—and with offices in two time zones—we can provide support when you need it. Give us a call now!

Sales and Customer Service

Toll Free: +1 866 383 1657

Email: salesgroup1@chipkin.com

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REVISION HISTORY

DATE	RESP.	DRIVER VERSION	DOCUMENT REVISION	COMMENTS
6 Jul 2018	PMC	0.00	0	Draft for Review
16 Jun 2021	YC	0.00	1	Updated to latest template