

# Case Study

# Irrigation, Building Automation and Weather Data

Chipkin has completed a driver which communicates with Vaisala Weather Transmitters using the Vaisala Ascii protocol. The driver can read data from a trunk of 1 or more transmitters. Coupled with the Chipkin Weather Data Server which serves weather forecasting data you get even more opportunities to tune your system to minimize resource wasting and maximize efficiency. Chipkin have also complete drivers to popular irrigation systems like Hunter. Now you are in control.



Want this data in Modbus, BACnet, Rockwell, GE, Omron, XML, Json ... 140+ choices.



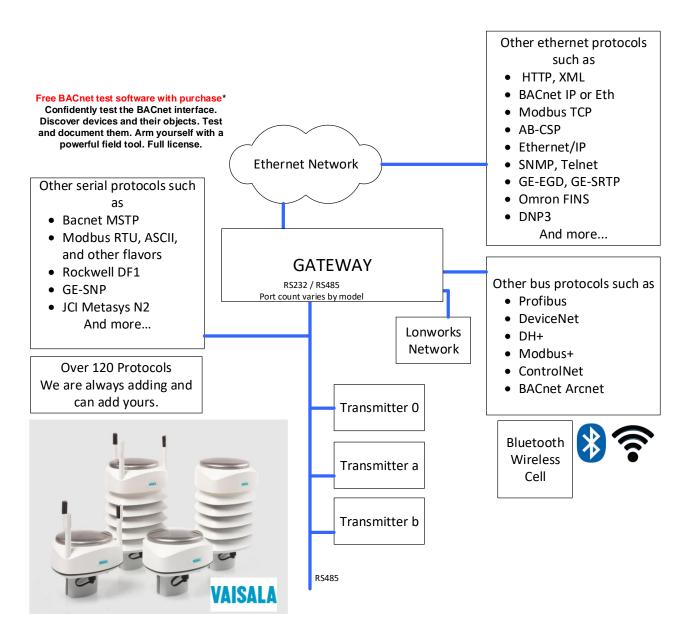
#### Introduction

Vaisala are weather sensing experts. There weather transmitters support RS485 and RS232. Up to 62 transmitters may be connected on one trunk. The Gateway can read data from each transmitter and send reset commands.

The products are highly regarded, incredible money for value, easy to install and now – easy to integrate thanks to the Chipkin gateway. Chipkin have implemented the driver on the 'FieldServer' and 'QuickServer' gateways manufactured by Sierra Monitor Corp. of California.

Any Data that can be read from the Vaisala transmitters can be exposed using protocols like Modbus, BACnet, EthernetIP ... any of the 140+ protocols in our library. The driver may be linked with any of the these other protocols.





Vaisala Weather Ascii

#### Chipkin Automation Systems

Protocol to protocol – Enabling the IOT Internet of Things

Products that support approx.. 140 major protocols. If we don't have a solution for you we will make you one. More than a dozen customers a year have a custom driver developed for them.



Chipkin are highly regarded for their outstanding support. System integration isn't always trivial even if that is what they tell you.

The Chipkin BACnet stack comes with a 100% copyright infringement indemnity to make corporate lawyers happy. Customers get direct access to the stack developers for coaching and problem solving.

#### Vaisala

We have two global business areas that develop, manufacture and market innovative products and services for environmental and industrial measurement.

Our Weather and Environment Business Area serves selected weather-dependent markets where accurate, real-time, uninterrupted, and reliable weather data is essential to run efficient operations.

Our Industrial Measurements Business Area serves industrial customers in life science, power transmission, and targeted industrial applications. It offers a broad range of measurement instruments to ensure operational quality and productivity.

Innovation and technology are cornerstones for Vaisala's success and we keep advancing the art of environmental observations. Technological innovation is in our DNA, and want and need to be at the cutting edge of development, to find new solutions to customer needs in demanding applications.

We invest 13 % of our net sales in R&D and our pride is our state of the art in-house cleanroom, sensor production, manufacturing and science-based technology leadership.

We are headquartered in Finland and employ approximately 1,850 professionals worldwide and are listed on the Nasdaq Helsinki stock exchange.



#### Some Details

Driver can read data and perform resets.

The following data is available

Wind speed minimum
Wind speed average
Wind speed maximum
Wind direction minimum
Wind direction average
Wind direction maximum
Air pressure
Air temperature
Internal temperature
Relative humidity
Rain accumulation
Rain duration
Rain intensity
Rain peak intensity
Hail duration
Hail peak intensity hits/cm2h
Heating temperature °C
Supply voltage V V



3.5 V ref. voltage V V
Hail peak intensity hits/cm2h
Heating temperature
Supply voltage
3.5 V ref. voltage



#### Keywords

Vaisala Modbus

Vaisala BACnet

Vaisala EthernetIP

Vaisala Building Automaton

Vaisala protocols

Vaisala gateway

Vaisala SD12

Vaisala ascii

**VAISALA** Integration

**VAISALA BAS** 

**VAISALA Building Automation** 

Vaisala converter

Vaisala protocol converter