

Wi-Fi Network Bridge

Industrial Wi-Fi Network Bridge with remote control and data logger



WBV4A

WiFi 802.11b/g/n

Compliance FCC/CE certified

Enables remote control, programming, and monitoring from any web browser on a PC or mobile device. It incorporates a customizable temperature data logger with storage and visualization, using an intuitive graphical user interface (GUI).

■ Features

- Adds Wi-Fi connectivity to select Yamato oven, muffle furnace, and incubator models
- Accessible from any PC or mobile device that is network connected
- Unique network name based on MAC address or user assigned name
- External high gain antenna (+8dB) for excellent WiFi coverage
- No software applications required on PC or mobile device
- Multi-color LED for Wi-Fi status and other adapter functions

■ Specifications

Model	WBV4A
Wi-Fi	802.11b/g/n, 2.4GHz compliant (FCC/CE certified)
Power	100V-240V AC, from Yamato equipment internal switched AC PDU
Dimensions	Power module: 55mm x 25mm x 25mm Controller module: 40mm x 40mm x 18mm External Antenna: 145mm x 20mm x 15mm
Indicator light	Wi-Fi, Operation, Communication status
Firmware	Built-in TCP/IP & UDP, Web server, Websocket server, OTA updates
Included accessory	Six feet standard micro USB to USB type 'A' cable to interconnect power module to controller module

■ Bridge Functions

Wi-Fi setup with access point discovery
Maintenance functions (firmware update, device name, file editor, etc.)
Data logger functions (log enable/disable, sample interval, log retrieval (charts), etc.)
Remote control functions (Start/Stop Fixed temperature and Program cycles)
Remote program functions (upload/download/edit Programs and Patterns)
Status page with real-time temperature chart and equipment information
Direct access to VS4 control/status registers

■ Network Topology



Wi-Fi Bridge supports the following Yamato models:

- * ADP Vacuum Ovens
- * DP Vacuum Ovens
- * DKN Forced Convection Ovens
- * DVS Natural Convection Ovens
- * FO Muffle Furnaces
- * IC Incubators

Web Interface Screens*

Home Page

Wi-Fi Bridge Main Menu

File Editor Temperature chart Firmware update Remote operations

Enter command. (H for help)

```
Friendly name: DKN-547F
DKN-547F
serial number: 59198/1
First use: 2020 03 23
Installed options:
Temperature chart,
Remote control,
Program edit,
local logging.
```

DKN-547F Temperature Chart

log date (yyyymmdd) 100 Msgs: ("logtime": "15:45")

Monitor real time status with temperature chart

Remote Program Screens*

Program Editor

Choose File No file chosen / Upload Create

edit.htm	1	Program 3:
favicon.ico	2	Last step pattern 1: 10
graphs.js.gz	3	Step: 1 2 3 4 5 6 7 8 9 10
readme.txt	4	Temp: 0 0 0 0 0 0 0 0 0 0
config.csv	5	Time: 0 0 0 0 0 0 0 0 0 0
Program1.txt	6	Retr: 1 1 1 1 1 1 1 1 1 1
20200324.txt	7	Rep: 1 1 1 1 1 1 1 1 1 1
20200325.txt	8	
20200326.txt	9	Last step pattern 2: 10
20200327.txt	10	Step: 1 2 3 4 5 6 7 8 9 10
console.htm	11	Temp: 0 0 0 0 0 0 0 0 0 0
prgchart.htm	12	Time: 0 0 0 0 0 0 0 0 0 0
remops.htm	13	Retr: 1 1 1 1 1 1 1 1 1 1
index.htm	14	Rep: 1 1 1 1 1 1 1 1 1 1
registers.txt	15	
Program3.txt	16	Last step pattern 3: 4
	17	Step: 1 2 3 4 5 6 7 8 9 10
	18	Temp: 50 75 99 35 0 0 0 0 0 0
	19	Time: 30 20 45 60 0 0 0 0 0 0
	20	Retr: 1 1 1 1 1 1 1 1 1 1
	21	Rep: 1 1 2 1 1 1 1 1 1 1
	22	
	23	

Design a program from any PC or mobile device

Remote Ops Root Page

Remote Control

target temperature Start Fixed Temp Stop Fixed Temp

program pattern Start program view program Stop program

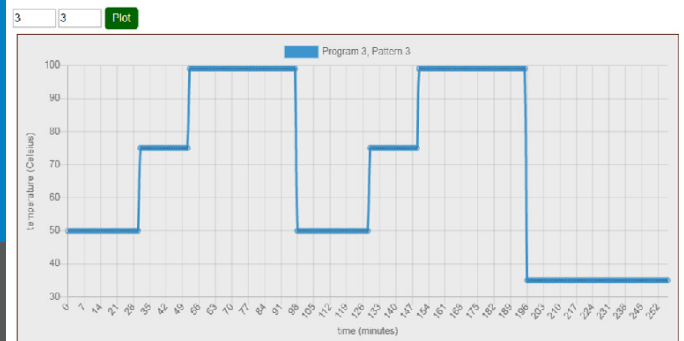
Oven Messages:

Home Temperature chart

Select remote control function

Program Temperature Profile Visualizer

Program 3, Pattern 3 Temperature profile



Visualize real time all steps of the program

Wi-Fi Manager

New __ Bridge

WiFiManager

Configure WiFi

Configure WiFi (No Scan)

Info

Reset

Configure Wi-Fi with simple easy steps

Log File Sample

Choose File No file chosen / Upload Create

edit.htm	1	00:00:19, 21 C,
favicon.ico	2	00:02:19, 21 C,
graphs.js.gz	3	00:04:19, 21 C,
readme.txt	4	00:05:19, 21 C,
config.csv	5	00:08:20, 21 C,
Program1.txt	6	00:10:20, 21 C,
20200324.txt	7	00:12:20, 21 C,
20200325.txt	8	00:14:20, 21 C,
20200326.txt	9	00:15:20, 21 C,
20200327.txt	10	00:18:21, 21 C,
console.htm	11	00:20:22, 21 C,
prgchart.htm	12	00:22:22, 21 C,
index.htm	13	00:24:22, 21 C,
registers.txt	14	00:25:22, 21 C,
	15	00:28:23, 21 C,
	16	00:30:23, 21 C,
	17	00:32:23, 21 C,
	18	00:34:23, 21 C,
	19	00:35:24, 21 C,
	20	00:38:24, 21 C,
	21	00:40:24, 21 C,

Generate a data log downloadable file

* Illustrations are subject to change and may not be present in all bridge models