HMC4000 | HMI+PLC Advanced Series

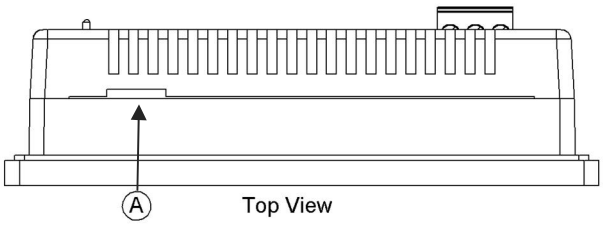


4.3” ~ 10.1” Touchscreen HMI+PLC

- Up to 5 Discrete I/O Modules Supported
- Up to 1024 x 600 Pixel Resolution (10.1” model)
- Web Server, Ethernet, and Serial Communication
- VNC, FTP Server and E-Mail Functionality
- IP66 Rated for Washdown Environments

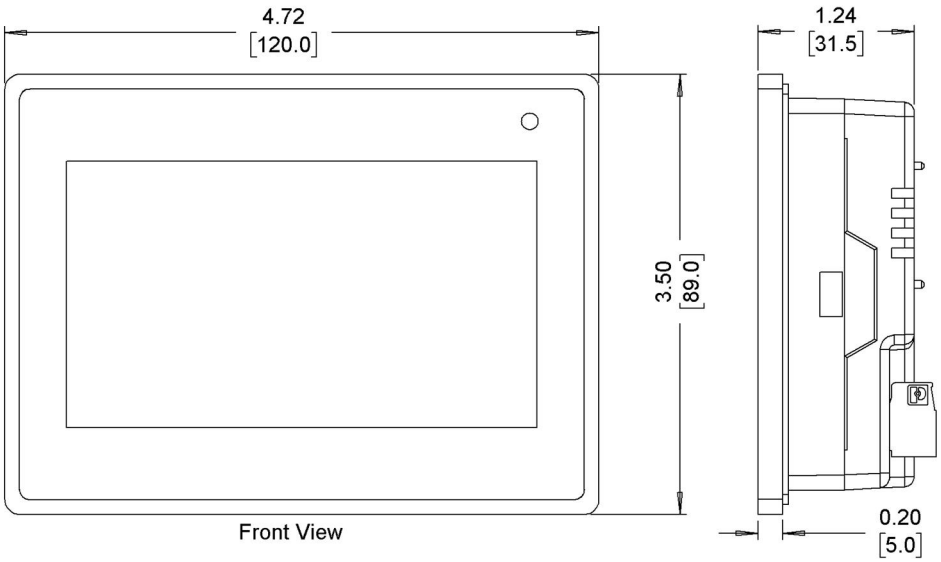
System	**CPU**	32-bit RISC, 528 MHz		
	Memory (Flash)	4 GB		
	Memory (RAM)	512 MB		
	Memory (Data Log)	50 MB		
	Memory (User Application) (Ladder Logic) (Alarms) (Retentive) (Keep Registers)	1 GB combined		
	RTC	Built-in		
Touch Screen	**Type**	4-wire resistive touch		
I/O Ports	**LAN**	1 x 10/100 Base-T RJ-45		
	CANbus	N/A		
	USB Host	1 x USB 2.0 (Type A)		
	USB Client	1 x USB 2.0 (Type C)		
	SD Card Slot	1 x Secure Digital (SD/SDHC) Memory Card Socket, up to 32 GB		
	Serial	1 x DE9S COM1: RS-232, COM2: RS-485 2 or 4 wire*	1 x Terminal block HDR 3.81 mm COM1: RS-232/RS-485, 2 wire or 4 wire	1 x DE9S COM1: RS-232/RS-485, 2 wire or 4 wire
			1 x DE9S COM2: RS-232/RS-485, 2 wire or 4 wire	1 x DE9S COM2: RS-232/RS-485, 2 wire or 4 wire
	Expansion	1 (for optional I/O module)	3 (for optional I/O modules)	5 (for optional I/O modules)
Display	**Display Type**	**4.3” WQVGA TFT**	**7” WVGA TFT**	**10.1” WSVGA TFT**
	Size (W x H)	3.70” x 2.1” [95 x 54 mm]	5.98” x 3.58” [152 x 91 mm]	8.74” x 5.24” [222 x 133 mm]
	Max. Resolution	480 x 272	800 x 480	1024 x 600
	Max. Colors	16.7 M	16.7 M	16.7 M
	Luminance (cd/m²)	400	350	350
	View Angle (H°/V°)	115/115	140/120	140/120
	Contrast Ratio	500:1	500:1	500:1
	Backlight Lifetime (Hours)	25,000+	25,000+	25,000+
Electrical	**Input Voltage**	24 VDC ±15%	24 VDC ±15%	24 VDC ±15%
	Input Current (Base only)	160 mA @ 24 VDC	220 mA @ 24 VDC	270 mA @ 24 VDC
	Input Power (Base Only)	3.84 W	5.28 W	6.48 W
	Input Current w/Expansion(s)	210 mA @ 24 VDC (with 1 expansion)	370 mA @ 24 VDC (with 3 expansions)	520 mA @ 24 VDC (with 5 expansions)
	Input Power w/Expansion(s)	5.04 W	8.88 W	12.48 W
Mechanical	**Dimensions (W x H x D)**	4.72” x 3.50” x 1.24” [120 x 89 x 31.5 mm]	7.32” x 5.43” x 1.22” [186 x 138 x 31 mm]	10.55 x 7.48 x 1.30” [268 x 190 x 33 mm]
	Panel Cutout (W x H)	4.37” x 3.15” [111 x 80 mm]	6.89” x 5.00” [175 x 127 mm]	10.08” x 7.01” [256 x 178 mm]
	Net Weight	Approx. 0.44 lbs (0.2 kg)	Approx. 0.88 lbs (0.4 kg)	Approx. 1.98 lbs (0.9 kg)
	Enclosure	Plastic, Black		
	PCB Coating	N/A		
	Mounting	Panel		
Environmental	**Operating Temperature**	32 ~ 122° F (0~50° C)		
	Storage Temperature	-4 ~ 185° F (-20 ~ 85° C)		
	Relative Humidity	10 ~ 95% (non-condensing)		
	Shock Resistance	IEC 60068-2-27, 25g, 11ms, 6 shocks per axis, total 18 shocks (X, Y, Z)		
	Vibration Resistance	5~150Hz, 3g peak, (X, Y, Z)		
	Rating	IP66 compliant front panel		
	Certifications	cULus (Class I, Div 2), CE, RoHS		
Software	MAPware-7000 (v2.36 or later)			
Notes	* One DE9S port supports RS-232 and RS-485 on different pins. “Y” Type Splitter cable (Maple Systems P/N 7431-0122 – Sold Separately) can be used for separate RS-232 and RS-485 use simultaneously. HMC4000 series units are compatible with all HMC3 I/O modules. Specifications subject to change without notice.			

HMC4043A-M



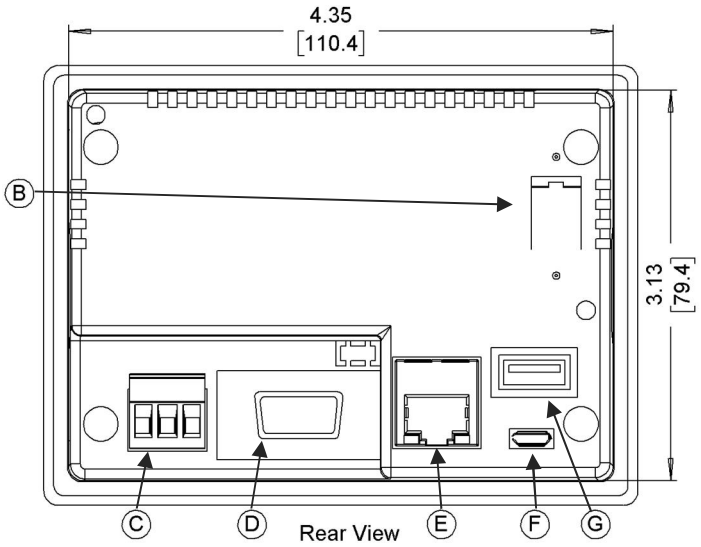
Top View

Dimensions are in inches [mm]

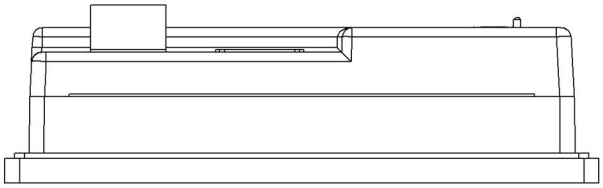


Front View

Side View



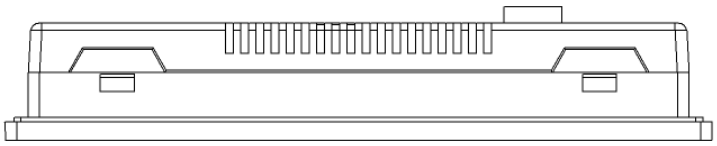
Rear View



Bottom View

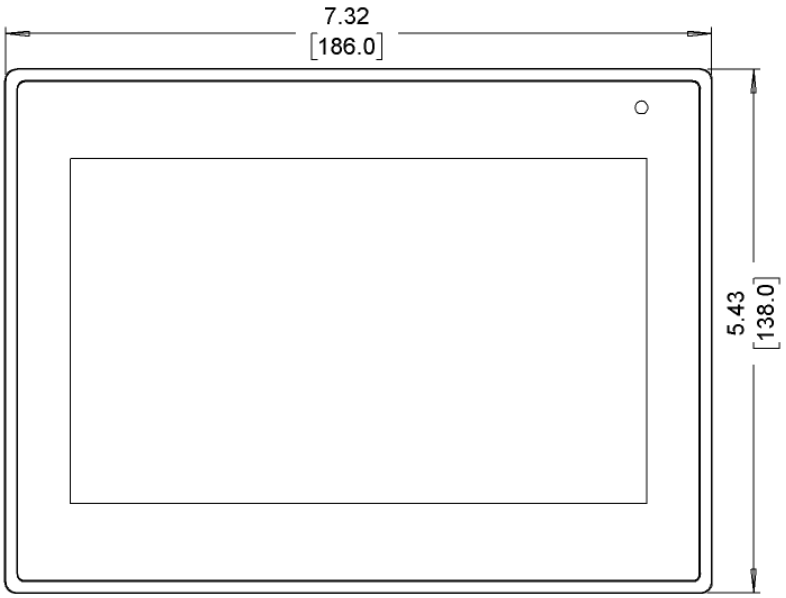
A	MicroSD Card Slot
B	Expansion Port
C	Power Connector
D	COM Port DE9S
E	RJ45 Ethernet Port
F	USB 2.0 Client Port
G	USB 2.0 Host Port

HMC4070A-M

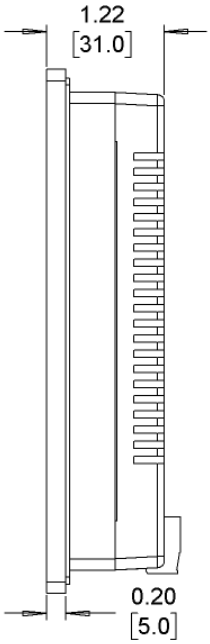


Top View

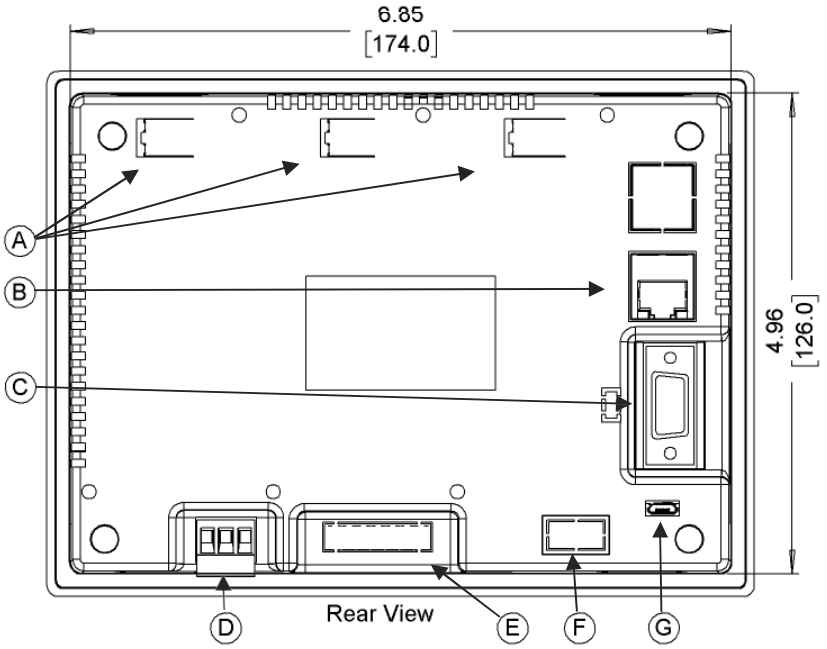
Dimensions are in inches [mm]



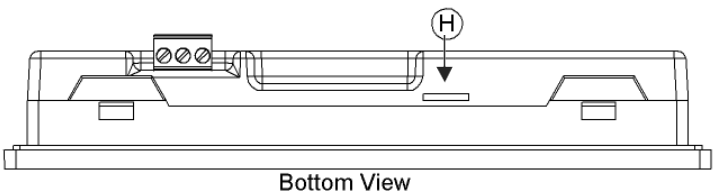
Front View



Side View



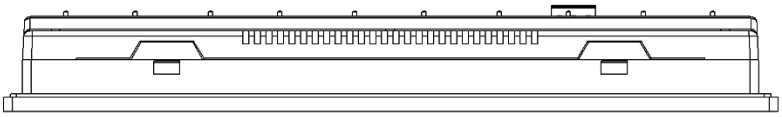
Rear View



Bottom View

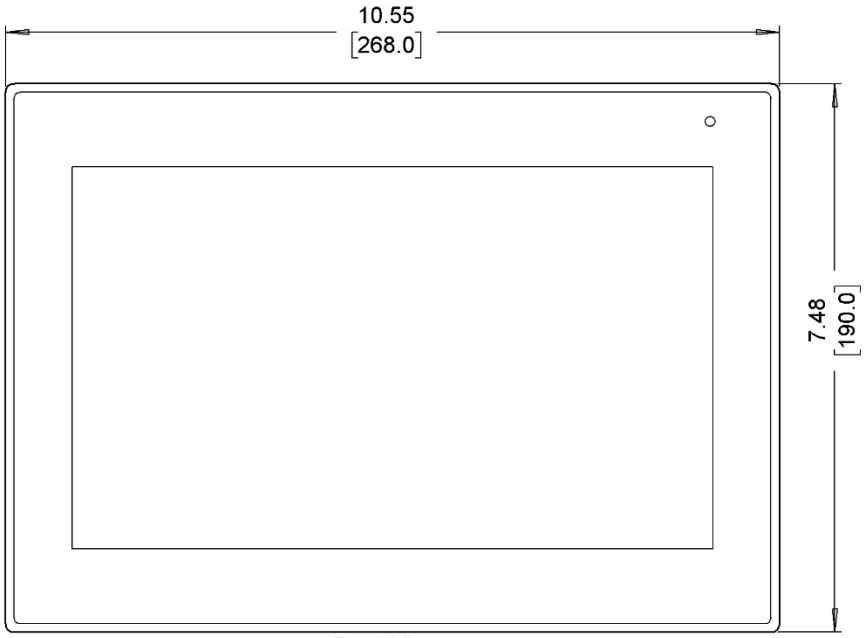
A	Expansion Ports
B	Ethernet Port
C	COM Port DE9S
D	Power Connector
E	COM Port Terminal Block Connector
F	USB 2.0 Host Port
G	USB 2.0 Client Port
H	MicroSD Card Slot

HMC4101A-M

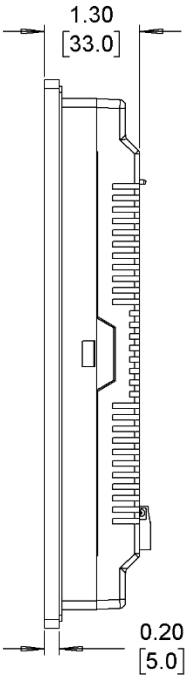


Top View

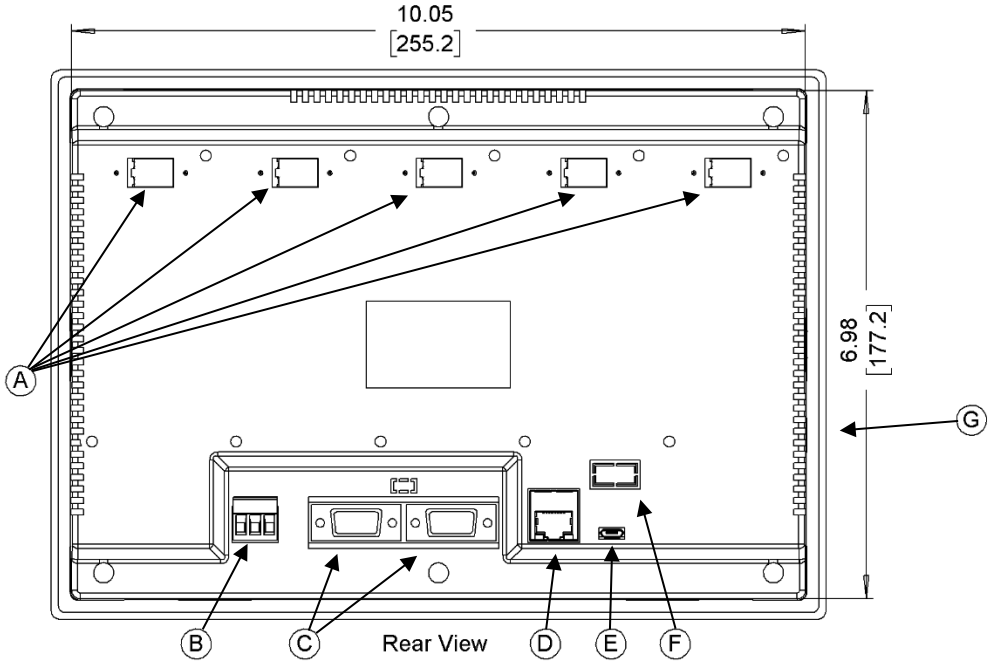
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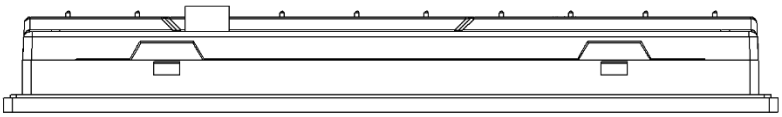
Front View



Side View



Rear View



Bottom View

A	Expansion Ports
B	Power Connector
C	COM Ports DE9S
D	Ethernet Port
E	USB 2.0 Client Port
F	USB 2.0 Host Port
G	MicroSD Card Slot

Why Buy A Maple HMI+PLC

In addition to our powerful and affordable hardware, we'll also continue to support your company long after a sale. Wide product selection, large in-stock inventory, outstanding product warranty, free technical support and software, and in-house repairs with quick turnaround times, Maple Systems has your business covered.



Class I, Division 2

We offer CID2 certified HMI+PLCs designed to keep operators and their environment safe. These combo units are being used in a potentially dangerous environment or around flammable hazards every day and are designed to prevent dangerous explosions and ensure worker safety.

Our CID2 HMI + PLCs are used in industries including oil and gas, mining, painting, chemical processing, pharmaceutical, food processing, and more.
We also have CID2 HMIs, and CID2/ Atex certified Industrial Panel PCs and Industrial Monitors.

Add I/O to Customize

Our expandable HMI + PLC combines the ease of a graphic HMI with PLC functionality in one unit and one software. Add additional I/O modules to customized for your application.

When deciding on which HMI + PLC to choose, the number and type of I/O and the display size are the key differentiators and factors. Consider how many inputs (analog/digital) your program requires. Do you need separate analog and digital modules, or would a module with both analog and digital best meet your needs? With so many combinations to choose from, we probably have what you are looking for.

Build your SCADA

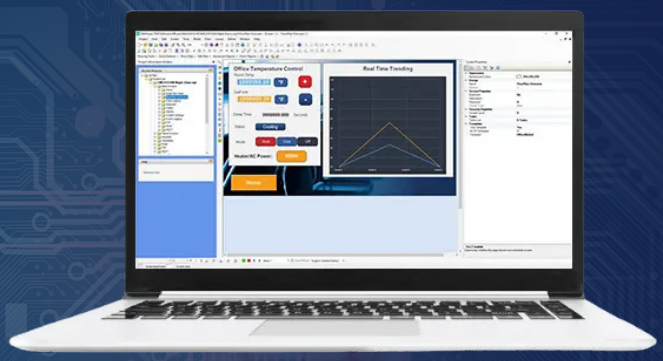
We offer all the components you need to create your own unique level of supervisory data acquisition and control, from the simplest stand-alone machine to sophisticated multi-device networked production line(s), all the way to enterprise-level operations and IIoT functionalities leveraging cloud connectivity.

Our products can help you standardize communications between devices, gluing different systems together for one source to your SCADA. No need to redesign your entire application. Keep the components that are already working for you, just add Maple Systems components to grow your abilities to supervise, control, and acquire data.

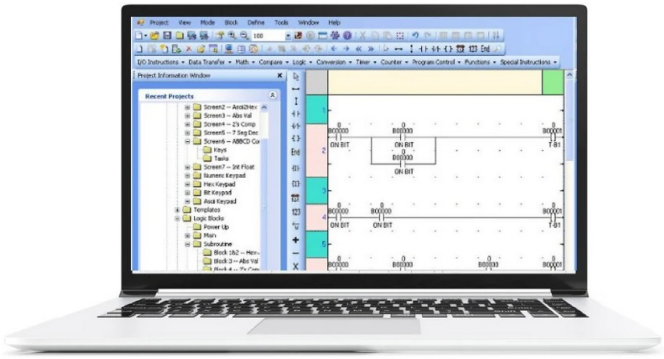
Power and Flexibility

HMI+PLC Configuration Software

MAPware-7000 is the configuration software used to program all our HMI+PLCs. Use just one software application to program both the screens that appear in the display as well as the logic that controls your system. Create projects using the tools and graphic images included with the software to provide a functional user-interface for your control system. In addition, the built-in or expandable I/O can be used to control and monitor your system utilizing the logic instructions integrated in the software.



Our HMI+PLCs support IEC61131-3 program language. The graphics program and logic program work together to provide complete control through the graphic interface. Learn more about the MAPware-7000 programming environment.



MAPware-7000 Logic Editing Mode

MAPware-7000 minimizes software development time by making it easy to design & program all aspects of your project in one environment. Stop worrying about if your HMI and PLC are communicating to each other, MAPware-7000 was created to eliminate this frustration and provides one interface to interact with your whole control system.

Connect the hardware using a protocol you know

Capable of a variety of communication protocols, our HMI+PLCs will easily integrate with your preferred PLC brand Including Maple Systems, Allen-Bradley, Siemens, Omron, ABB, Keyence, Panasonic, and Mitsubishi, creating a powerful edge gateway at a great price has never been easier.

Ethernet capable HMI+PLCs are configured as a Modbus TCP Server by default, and can easily be configured as a Modbus Client on serial or Ethernet networks.

See the full list of supported controller manufacturers

ASCII
Allen-Bradley
Danfoss
KEYENCE
BALDOR
SIEMENS
Modbus
OMRON
Panasonic
ABB
MITSUBISHI

HMI+PLC Feature Overview	
Standard HMI+PLC	**Advanced HMI+PLC**
Alarm & Event Messages	Alarm & Event Messages
Application Memory Status	Application Memory Status
ASCII Characters	ASCII Characters
Bar Graphs	Bar Graphs
Combo Button	Combo Button
Data Logging and Trend Graphs	Data Logging and Trend Graphs
Data Monitor	Data Monitor
Data Sampling	Data Sampling
Data Window	Data Window
Expandable IO	Expandable IO
FTP Client	FTP Client
Functional Graphics	Functional Graphics
IEC61131.3	IEC61131.3
Importing and Exporting Tags	Importing and Exporting Tags
Library - Pictures	Library - Pictures
Library - Tags	Library - Tags
Logic Blocks	Logic Blocks
Meters and Bar Graphs	Meters and Bar Graphs
Objects – Bit/Coil Based	Objects – Bit/Coil Based
Objects – Register-based	Objects – Register-based
Objects – Tag Based	Objects – Tag Based
Offline Simulation	Offline Simulation
PLC Ladder Logic	PLC Ladder Logic
Real Time XY Plots	Real Time XY Plots
Real-Time Clock	Real-Time Clock
Real-Time Monitoring	Real-Time Monitoring
Recipes	Recipes
Security and Passwords	Security and Passwords
Tag Database	Tag Database
Tasks - Action, Trigger	Tasks - Action, Trigger
	Barcode Scanner
	Custom Start Screen
	MQTT - Publisher
	MQTT - Subscriber
	Remote Access
	USB Disk Download
	VNC Server
	Email
	FTP Server
	Internal Settings Menu