



OPERATION MANUAL

InterLINX[®] WiFi IoT Communicator

V1

FPC-30126-XX

INTRODUCTION

The InterLINX[®] WiFi is a compact, intelligent wireless communicator designed to provide reliable alarm reporting, remote control, and system monitoring over an existing Wi-Fi network. Built for seamless integration into modern automation and security installations, it connects directly to the Propitect platform, enabling real-time visibility, event notifications, and flexible device management.

With support for both digital inputs and Modbus RTU over RS-485, the InterLINX[®] WiFi offers versatile connectivity to a wide range of equipment, including sensors, controllers, meters, and plant devices. This makes it an ideal interface module for applications requiring condition monitoring, event triggering, or remote access to field devices.

Despite its small footprint, the InterLINX[®] WiFi delivers robust performance and dependable communication, providing installers and system integrators with a practical solution where cellular coverage is limited or where a local Wi-Fi network is preferred. This manual outlines the installation, configuration, operation, and maintenance of the InterLINX[®] WiFi device to ensure optimal performance and long-term reliability.

CONTENTS

SAFETY	2	CONNECTIVITY	8
INSTALLATIONS	3	Wi-Fi Hotspot Mode	8
SPECIFICATIONS	3	Wi-Fi Station (STA) Mode	8
CONNECTIONS	4	Wi-Fi Internet Mode	9
HARDWARE DETAILS	5	CONFIGURATION PORTAL	9
Enclosures	5	Operations Menu	9
Power Supply	5	System Status Page	10
Antennas	5	IO Status Page	10
External Battery Backup	5	Pump Module Status Page	10
Digital Inputs (B0-B1)	5	System Configuration Page	11
Digital Relay Output (C0)	5	Wi-Fi Hotspot Configuration Page	11
Pulse Counter Inputs (B0-B1)	5	Wi-Fi Internet Configuration	11
Reset Button	5	Digital Alarm Configuration Page	11
ANTENNA INFORMATION	6	Pulse Counter Page	12
Installation Location	6	Analog Channels Page	13
Mains/Solar Powerup	6	Modbus Configuration Page	13
Testing Mobile Connection	6	Relay Configuration Page	14
LINK/STATUS INFORMATION	7	FUNCTIONS	14
LED Indicators	7	IOT Functionality	14
Indicator Functions	7		
Hardware Faults	7		

SAFETY

This Wi-Fi network connected alarm sender panel has been designed and built for applications that are Commercial and/ or Industrial in nature, operation, function and location. If the control panel is to be used in Domestic/Residential applications, where specific Wiring Rules in respect of 'electrical supply' protection may apply, it is the responsibility of the installing electrician to ensure compliance with relevant standards.

- Prior to installation, ensure power supply is isolated.
- Electrical connection to the panel must be carried out in accordance with the following pages.
- Additions or modifications to the control panel are not permitted and will void warranty.
- The controller is not intended for use by children or infirm persons without supervision.
- Repairs to the controller must only be carried out by a suitably qualified electrician. .



This manual makes use of the following symbols to indicate warnings that must be paid specific attention to



Damage to equipment or personal harm may occur if this instruction is not followed

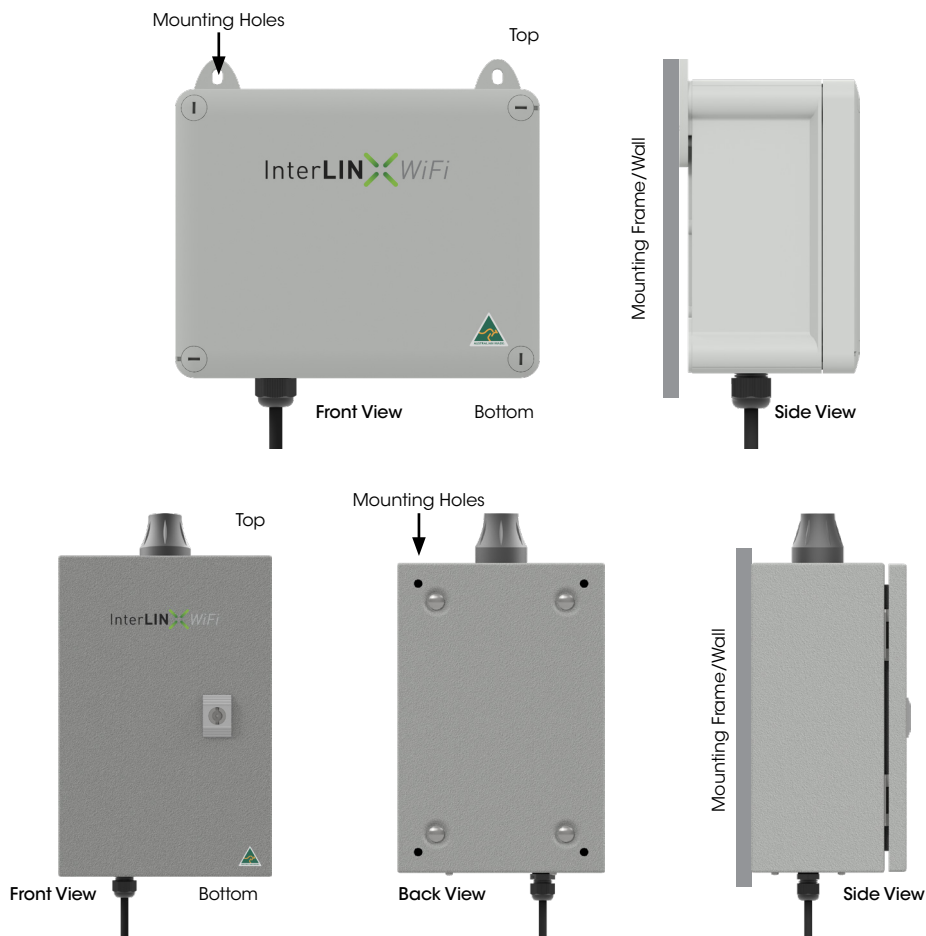


Electrical risk (electrocution hazard) may occur if this instruction is not followed

INSTALLATIONS



- InterLINX[®] WiFi must be installed in a position where mobile reception is available.
- InterLINX[®] WiFi enclosure must be mounted in a vertical position.
- Ensure mounting method does not compromise enclosure weatherproof rating.
- Ensure cables/conduits entering the panel have mechanical protection and that the penetrations are sealed and do not compromise the weatherproof rating of the enclosure.



SPECIFICATIONS

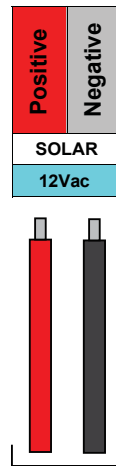
Power supply	8-24Vdc, Max continuous current draw of 310mA @ 12V and 160mA @ 24V
Operating Conditions	-20°C to 50°C
Digital inputs	2x digital inputs. Either 2 of which can be programmed as a Pulse Input. Trigger voltage 2.5Vdc, Input impedance 2400Ω
Outputs	1x Change over relay Rated load 1A@24Vac/dc
Serial Communications	RS-485 Modbus Master
Wi-Fi Hotspot	802.11 b/g/n, 2.4GHz, supports WAP, WPA2, WPA-3, including WPA3 open password free encryption
Configuration	Via Configuration Portal

CONNECTIONS

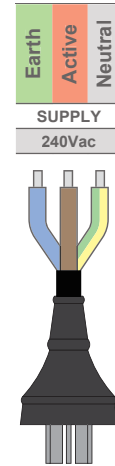


MAINS TERMINAL CONNECTIONS

- The 230Vac power lead (Non-Solar models only) is supplied terminated to the DIN rail mains terminals
- The 24Vdc Power supply terminals (Solar model only) will require the solar panel leads terminated on site



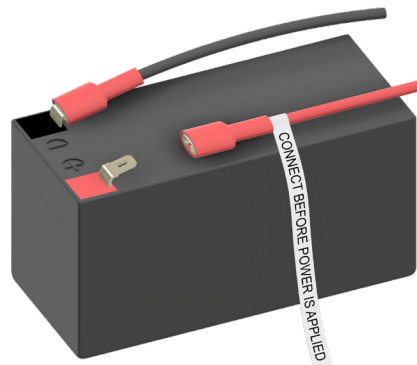
Solar Panel



Power supply lead connect to RCD Protected GPO

BATTERY CONNECTIONS (SOLAR MODEL ONLY)

For the FPC-30126-SOLAR model only, the internal batteries must be connected after all installation of the solar panel is completed. This will require the wire with the label "CONNECT TO ACTIVATE AFTER SOLAR PANEL INSTALLED" be connected to power the module.



InterLINX[®] WiFi MODULE CONNECTIONS

- The 12/24Vdc power supply connection is supplied already terminated
- The 12Vdc digital input alarm connection must use external volt-free switches for activation
- The relay output change over switch needs to be wired to a maximum load of 1amp @ 24Vac/dc
- The Modbus RTU RS-485 connection is a master and can connect to any slave devices.
- The antenna SMA jack will be supplied with either a local stub or enclosure mounted antenna



HARDWARE FEATURES

ENCLOSURES

The InterLINX[®] WiFi wireless communicator is available in two enclosure options to suit a wide range of installation environments. Both enclosure types provide secure housing for the device while ensuring reliable operation and protection against dust, moisture, and mechanical impact. There is two standard range of enclosures that are offered.

Poly IP55 Indoor Enclosure (FPC-30126-PE)

The polypropylene IP55-rated enclosure is designed for indoor installations where durability and ease of access are required.

Powder-Coated Metal IP65 Outdoor Enclosure (FPC-30126-ME)

The powder-coated metal IP65-rated enclosure is engineered for outdoor and industrial applications that require higher levels of environmental protection.

POWER SUPPLY

FPC-30126-XX (230Vac)

The FPC-30126 InterLINX[®] WiFi is supplied complete with a 1.5mtr long, 10amp, 230Vac supply lead with plug. This enables a simple connection to a standard GPO.

FPC-30126-SOLAR (24Vdc)

The FPC-30126-SOLAR InterLINX[®] WiFi is designed with internal batteries and loose supply of a 40 Watt solar panel to provide a constant 24Vdc supply. There is loose 5mtr connection cable tails for fitting to the panel once installed.

ANTENNAS

The FPC-30126-PE InterLINX[®] WiFi is supplied complete with a local module mounted 40mm stub 2.4GHz Wi-Fi antenna.

The FPC-30126-ME and FPC-30126-SOLAR InterLINX[®] WiFi is supplied with a top mounted low profile vandal and weather resistant 2.4GHz Wi-Fi antenna.

EXTERNAL BATTERY BACKUP

The InterLINX[®] WiFi can be powered from a battery with solar charging or UPS with battery backup. Please contact MATElec Australia with your application to have one of the team calculate the correct backup capacity.

DIGITAL INPUTS

The InterLINX[®] WiFi features 2 digital inputs (B0 & B1), which may be used to trigger alarm messages over Wi-Fi to Propitect[®] Cloud Monitoring Platform. The inputs will send a message on high (ON) and low (OFF) states with the alarm active direction selectable via the notify direction setting. The input high (ON) trigger voltage is 2.5Vdc and input impedance is 2400Ω. The digital alarm messages can be configured via the Hotspot Configuration Portal or via the Propitect[®] Portal

DIGITAL RELAY OUTPUT

The InterLINX[®] WiFi features 1 change over relay output, rated to 1A at 24V ac/dc, which can be remotely controlled via Propitect[®] Portal to enable or disable pumps or systems. The digital output can be controlled with a user programmed title relevant to the function they are performing. This is controlled by accessing Propitect[®] Portal and selecting the relay control ON or OFF slider. The output will remain in the set state until changed. Timers can also be configured to turn the relay off after a set time. The relay output can be configured via the Hotspot Configuration Portal or via the Propitect[®] Portal.

PULSE COUNTER INPUTS

The InterLINX[®] WiFi features 2 pulse counter inputs that can be assigned to either unused digital input (B0 & B1). Pulse inputs are commonly used to calculate flowrate or flow volume and raise alarm notifications based on threshold levels. These inputs and associated messages can be configured via the Hotspot Configuration Portal or the Propitect[®] Portal.

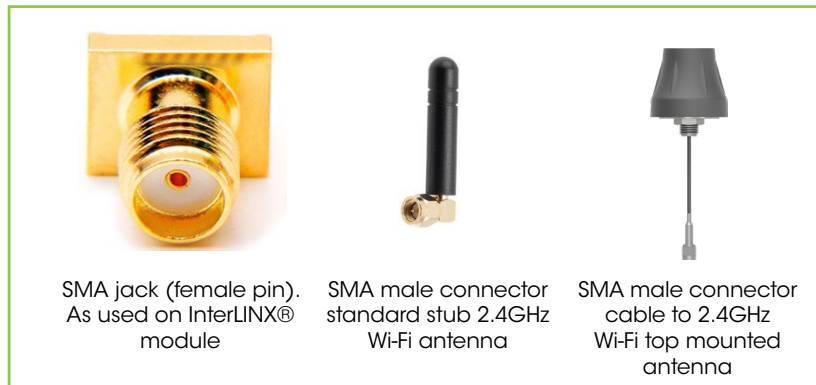
RESET BUTTON

The button located at the top end of the InterLINX[®] WiFi Communication device is used to toggle the Hotspot function, restart system or factory reset the module. Single press to toggle on Hotspot function. Hold this button for 3 seconds to perform a system restart. Press and hold this button for 30 seconds to perform a factory reset. After either reset function, the green and red indicator lights will be illuminated for 2 seconds to indicate that the InterLINX[®] WiFi is restarting.

****Any changes that have been made will be lost as the unit returns to default after a factory reset.***

ANTENNA INFORMATION

The InterLINX[®] WiFi uses the 2.4GHz Wi-Fi module which is suitable for IoT when connected to a 2.4GHz Wi-Fi network. The standard antenna installed on the FPC-30126-PE is a 2.4GHz Wi-Fi stub which is connected via an SMA port. The InterLINX[®] WiFi has a female SMA connector for the top mounted low profile antenna standard on the FPC-30126-ME and FPC-30126-SOLAR to provide better reception.



INSTALLATION LOCATION

The InterLINX[®] WiFi must be installed in a position where 2.4GHz Wi-Fi network reception is available. If the control panel is installed in a location where there is no signal strength, such as a building basement, an external high gain antenna can be connected to the InterLINX[®] WiFi module instead of the standard stub antenna. Generally, the maximum cable length for external antennas is 20m. If greater than this distance is required, the InterLINX[®] WiFi should be located closer to a suitable signal strength, with the signal cables running further to the location of the monitored control system.

MAINS/SOLAR POWERUP

Close and secure enclosure door, plug in power lead to GPO or connect leads to solar panel. Switch on power supply.

TESTING MOBILE CONNECTION

The InterLINX[®] LITE is tested and programmed by connecting to the Configuration Portal and to the cellular 4G network. Check the controller's indicator lights to ensure that power is on and SIM card is connected to mobile network.

Once connection has been achieved, the signal strength and performance of the antenna can be checked using the Configuration Portal or when connected to the Propitect[®] Portal in IoT mode.

LINKS/STATUS INDICATION



Indicates the device is energized.



Indicates the network status



Indicates the status or error

Status	Error	Description	Function	Cause	Remedy
○	○	Green Off, Red Off	Device off	No power to ME-Link module	Check power supply
●	○	Green Solid, Red Off	Device powered on. Wi-Fi Network not connected.	Wi-Fi network not connected	Check the Wi-Fi network signal strength by connecting to WiFi Hotspot and checking the Wi-Fi configuration. Network Signal Strength. This should be less than -90dBi
○	●	Green Off, Red Solid	Hardware fault	Hardware Fault	Try a power cycle by holding the reset button for 3secs. Refer Hardware Fault Chart below
○	✱	Green Off, Red continuously flashing	OTA Update Downloading	Allow firmware update to finish downloading	If this remains in this state for more than 10mins, power cycle the module
●	●	Green Solid, Red Solid	Device initial start-up	Allow device to finish booting up	If this remains in this state for more than 10mins, power cycle the module
✱✱✱	✱	Green 3 Flash, Red Flashing	Wi-Fi Data Mode - Activity	Connected and sending data (IoT) over Wi-Fi network	N/A
✱✱✱	○	Green 3 Flash, Red Off	SMS Mode - Idle	Connected and available to send SMS over cellular network	N/A
✱✱✱✱	○	Green 4 Flash, Red Off	Wi-Fi Hotspot Mode (Connected) - Idle	Connected and available to communicate on Wi-Fi Hotspot	N/A
✱✱✱✱	✱	Green 4 Flash, Red Flashing	Wi-Fi Hotspot Mode (Connected) - Activity	Allow device to finish activity	N/A

HARDWARE FAULTS

A RED indicator light on the PCB Board will illuminate if a hardware fault is logged by the InterLINX® WiFi system. The system will also log a description of the fault/s under the Hardware Faults heading when connected to the device over WiFi hotspot. The Hardware Fault is found in the System Status Tab of the WiFi hotspot. Below is a Troubleshooting guide for faults that are recorded:

Fault	Cause	Remedy
WRONG_PIC_VERSION	The InterLINX® WiFi board contains a PIC microcontroller that manages temperature, LEDs and Analog current readings. The WRONG_PIC_VERSION fault indicates the PIC controller is faulty.	Need a possible replacement of the module or update of firmware which could be done OTA (over the air). Contact Technical Support on 1800 281 282 for assistance
I2C_WRITE_FAILURE I2C_READ_FAILURE	These error codes indicate a communication error between the internal processors.	Need a possible replacement of the module or update of firmware which could be done OTA (over the air) Contact Technical Support on 1800 281 282 for assistance
VIN_LOW VCC_LOW	These error codes indicate that the internal voltages are too low. Ensure at least an 8-24V DC power supply is available to the InterLINK WiFi.	Check voltage supply to the InterLINX® WiFi is at least 8Vdc. May need a possible replacement of the module or update of firmware which could be done OTA (over the air). Contact Technical Support on 1800 281 282 for assistance
AUTH_TOKEN_MISSING	This is a result of a Device Error.	Module will need to be replaced. Contact Technical Support on 1800 281 282 for assistance
PROVISIONING_MOUNT_FAIL	This is a result of a Device Error.	Module will need to be replaced. Contact Technical Support on 1800 281 282 for assistance
LFS_MOUNT_FAIL	This error is a result of a faulty microcontroller. Note that some settings may have been reset to factory defaults.	Try restarting the device. If the issue persists, try a factory reset. If still present, module will need replacing. Contact Technical Support on 1800 281 282 for assistance

HARDWARE FAULTS CONT.

Fault	Cause	Remedy
SYSTEM_BROWNOUT	The system restarted because of low power.	Check that all power connections to the device are in good order and securely connected
TASK_WATCHDOG_TRIGGERED	The InterLINX [®] WiFi system restarted from the lock-up state.	Contact Technical Support on 1800 281 282 for assistance if fault remains after a power cycle
SYSTEM_WATCHDOG_TRIGGERED	The InterLINX [®] WiFi system restarted from the lock-up state.	Contact Technical Support on 1800 281 282 for assistance if fault remains after a power cycle
SYSTEM_CRASHED	This error occurred due to a system crash, which may be caused due to several issues. These include a firmware bug or saving a web page when a previous request is still in progress.	Try restarting the device first. If fault remains, an update of firmware OTA could be applied. If fault reappears, contact technical support on 1800 281 282 for assistance.
LFS_OLD_CONFIG_WAS_DELETED	System restart from the lock-up state after an over-the-air firmware update. This error will occur if the updated firmware is faulty	Try restarting the device first. If fault remains, an update of firmware OTA could be applied. If fault reappears, contact technical support on 1800 281 282 for assistance.

CONNECTIVITY

The InterLINX[®] WiFi communication device has three connectivity modes;

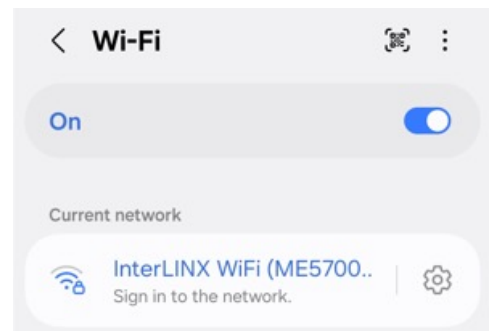
- Wi-Fi Hotspot mode for configuration
- Wi-Fi Station (STA) Mode
- Wi-Fi Internet mode for Propitector[®] communication

WI-FI HOTSPOT MODE

Configuration of the InterLINX[®] WiFi can be achieved using the Hotspot Configuration Portal by connecting in Hotspot mode.

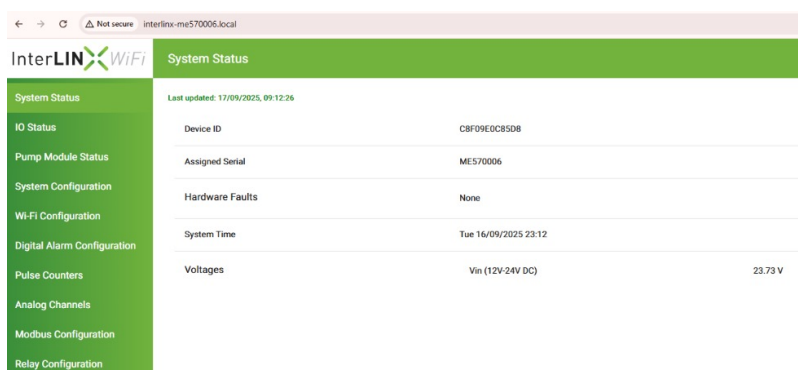
Factory default is for the Hotspot to appear in the list of scanned Wi-Fi networks (as shown in the image). The reset button on the InterLINX[®] WiFi can be used to toggle on the Hotspot signal should it have turned off on a time out.

The default password to access the Hotspot is **"Matelec20"**



WI-FI STATION (STA) MODE

Configuration of the InterLINX[®] WiFi can be achieved using the Configuration Portal by connecting in Wi-Fi Station (STA) mode. To connect to the configuration portal, your PC or phone needs to be connected to the same WLAN SSID Network within the area or building. Use a web browser on your device to type in the address InterLINX[®]-ME57xxxx.local (where ME57xxxx represents the device serial number). After entering the correct URL, you can directly access the device Configuration Portal across the wireless local-area network. (As shown in image to the right).



WiFi INTERNET MODE

Configuration of the InterLINX® WiFi can also be achieved by access to the device through the Propitect® Portal when the InterLINX® WiFi device is connected to the internet. A subscription and user access needs to be granted for the use of Propitect®.

CONFIGURATION PORTAL

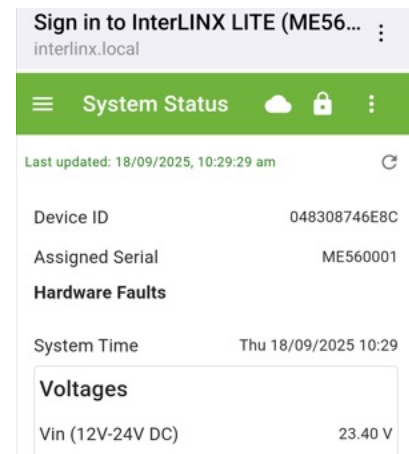
To use the Configuration Portal, ensure your device is connected to the InterLINX® WiFi Hotspot and you should be automatically redirected to the web server page as shown right.

The Configuration Portal provides for extensive configuration and status information. At every power-up, the device Configuration Portal is locked for view only. To unlock and gain access to change settings, click on the lock icon in the top right corner of the portal screen and enter the correct password.

The default password to unlock the settings is "LINX2025". Once unlocked, you can change this password to something of your choice by accessing the drop-down menu in the top right corner of the portal screen and selecting "Change Password"

***Important: A forgotten password can only be reset by contacting MATElec Australia.**

The settings will automatically lock after 10 minutes of unlocking, or this can be manually locked by clicking on the lock icon.



OPERATIONS MENU

The options menu is presented at the top right corner of the Configuration Portal.

Download Report	This will download a report of all current settings and status information into a HTML file for filing or printing.
Save Settings	This saves all configuration settings into a .json file.
Load Settings	This loads all settings from a previously saved .json file.
Test Modbus	This presents a popup screen useful for testing and diagnostics of connected Modbus devices.
Reboot	Restarts the device. After reboot is activated, wait for the system to restart and reconnect to the webpage.
Change Password	Change the password used to unlock the configuration portal.
Factory Reset	This restores the device to the factory settings. The factory reset can be performed either by selecting this option or by pressing the "reset button" for 30 seconds. Once the device is reset, the device will be restarted.
Advanced Settings	<p>This will display a pop-up with firmware version details, over the air updates and update from file.</p> <p>Downloading updates from file: Click the "Upload update from file" and load the bin file to load new firmware. Wait for firmware download to finish, before reconnecting to the webpage. This bin file will need to be provided by MATElec Australia</p> <p>Downloading updates from web address: OTA (Over The Air) update can be done from web page by entering the <url> provided by MATElec Australia in the space provided and clicking the download button. *Note that the sim card should have data enabled before downloading new firmware.</p> <p><i>*Note that the configuration portal may be unresponsive when OTA updates are in progress.</i></p> <p><i>The duration of OTA updates may vary, depending on the Wi-Fi or Internet network, and may take several minutes to complete.</i></p>

SYSTEM STATUS PAGE

This page contains the basic device, modem and SIM card related information, along with any hardware fault information.

Device ID and Assigned Serial	These are unique codes assigned to each InterLINX [®] WiFi device and are used to identify a particular device.
Hardware Faults	This will list any current hardware faults. See the table at the end of the document for more information.
System Time	After the system is powered on, the Time is derived from the connected internet Network. Once the time is updated, the system uses an internal RTC to get the current time. If the system is powered up and device is not connected to Internet, the System Time will display 'Not Set'.
Voltages	This section will list the external supply voltages and any other internal voltages that are monitored.

IO STATUS PAGE

This page shows the status of the external inputs and output connected to the InterLINX[®] WiFi Module.

Digital Readings (B0-B1)	Status of the digital inputs OFF or ON.
Relay Output (C0)	Status of the relay output OFF or ON.
Pulse Counter (PC0-PC1)	The status of the pulse rate and the total pulses read on each pulse counter.
Analog Channels	The source and scaling for each of the 5 available

PUMP MODULE STATUS

The InterLINX[®] WiFi has a Modbus port that can connect directly to the Modbus of compatible MATElec Controllers. For each of the four Modbus channels, the following is reported;

Modbus Status	Information on the Modbus Type, Communication Status, Valid Responses, Timeouts, Errors, Raw Analog Value and Raw AUX Value
Modbus Pumps	Information on the Pumps connected on Modbus with individual pump starts, starts last hour, Total pump run hours, Pump run Time in Hours Today
Modbus Faults	Information on the Modbus Faults includes Last Communication Error, Time stamp of error, and Alarms & Faults.

Any communication status other than "Connected" indicates a communication error. Possible communication faults include:

- Hardware connections
- Matching Slave Address
- Overlapping Slave Address (same Slave Address used for multiple modbus devices)
- Not enabling "send device Faults/ Alarms" checkbox in Modbus Device page
- Baud rate mismatches

SYSTEM CONFIGURATION PAGE

This page provides details on the identification, time zone, and Modbus Configuration settings.

All system configuration changes need the device settings to be unlocked to allow these changes.

Device Title	Default device title is default as InterLINX® WiFi. This can be changed to a title of choice.
Use Manual Timezone	The time zone is by default set via Wi-Fi internet network. To enable manual time zone, click Enable and set the zone.
Modbus Configuration	Select the Baud rate, Parity and Stop bits to match the connected slave Modbus device.

WiFi HOTSPOT CONFIGURATION PAGE

This page provides information and settings for the Wi-Fi Hotspot and Internet connections.

Apply Hotspot Configuration settings immediately	Checking this box will allow any changes to the Hotspot Name or Password to take effect immediately after activating the save button. This will cause a reboot of the hotspot.
Hotspot Name (SSID)	This is the Wi-Fi Hotspot name (default is InterLINX® WiFi ME57XXXX, where the ME57XXXX is the serial number). This can be changed to a title of choice if the device settings are unlocked.
Hotspot Password	Password for Hotspot access. The default Password is "Matelec20". This password can be changed to your choice if the device settings are unlocked Important: if the hotspot password is forgotten then the only way to recover will be to perform a factory reset, which will also reset all other settings.
Hotspot timeout and Timeout Enable	This function is not enabled by default. To configure a hotspot signal timeout, tick the check box and select the timeout period. If there are no active Wi-Fi connections for the specified timeout, the hotspot will be disabled.
Start Hotspot at power on	This setting determines whether the hotspot should be activated at power on (the default behaviour). If the setting is disabled, the user needs to manually press the reset button on the InterLINX® WiFi board to enable the hotspot.

WiFi INTERNET CONFIGURATION

To connect InterLINX® WiFi to the internet over Wi-Fi, the Enable Wi-Fi internet connection setting needs to be on. The Wi-Fi network name and password should be entered in the SSID and Password fields to successfully connect to the internet.

Enable Wi-Fi Internet Connection	To enable Wi-Fi Internet Connection for access to Propitect®
Wi-Fi Network Name (SSID)	This is the Wi-Fi Network name that you are wanting to connect to.
Wi-Fi Network Password	Password for Wi-Fi Network you are wanting to connect.
Connected Network	Name and details of the Wi-Fi Internet Network the InterLINX® WiFi is connected to
Available Networks	Details of all available networks after scanning is complete

DIGITAL ALARM CONFIGURATION PAGE

The InterLINX® WiFi has 2 digital inputs (B0 & B1) which can be used to trigger alarms to be viewed on Propitect®.

All Digital Alarm Configuration changes need the device settings to be unlocked to allow these changes.

Relay Control	If this option is enabled, the digital input can be configured to activate the relay output. The relay timer must be disabled to allow this function to operate.
---------------	---

DIGITAL ALARM CONFIGURATION PAGE CONT.

Relay Trigger Input Direction	This option is used to select when the relay is activated by the digital input state If the Relay Input Trigger Direction is set to 'Off', the relay output will be triggered when the digital input goes from ON state to OFF state If the Relay Input Trigger Direction is set to 'On', the relay output will be triggered when the digital input goes from OFF state to ON state
Enable Alarm	If this option is enabled, the digital alarm can be configured.
Alarm Trigger Direction	This option is used to select the alarm activation direction. If the Alarm Trigger Direction is set as 'Off', the alarm will be triggered when the digital input goes from ON state to OFF state. If the Alarm Trigger Direction is set as 'On', the alarm will be triggered when the digital input goes from OFF state to ON state.
Alarm Activated Message	The text entered in this field is added to each of the activation messages of that input.
Alarm Deactivated Message	The text entered in this field is added to each of the deactivation messages of that input.
Alarm Activation Delay	This delay ensures that no false alarms are sent. If the Alarm state (say Alarm Activation) is in the Alarm Trigger Direction for the Alarm Activation delay (say ON state), the alarm activation message will be sent.
Alarm Deactivation Delay	This delay ensures that no false deactivations messages are sent.

PULSE COUNTER PAGE

The InterLINX® WiFi has 2 pulse counters – PC0 and PC1. Pulse counting is an alternative function of each of the digital inputs. If the digital input is used as a pulse counter, then disable the digital alarm of the digital input to stop receiving false alarms. The pulse counters are designed to be used to calculate the flow/pulse rate (of water flow) and trigger alarm notifications based on the threshold levels

If configured, the pulse counter will read the number of pulses per second/minute from the digital input. This pulse is used to calculate the flow rate based on the below configured pulse counter settings.

All Pulse Counter Configuration changes need the device settings to be unlocked to allow these changes.

Name of Pulse Counter	This is the name given to the pulse counter and is default as "Pulse Counter 1" and "Pulse Counter 2". These can be changed to a title of choice if the device settings are unlocked.
Pulse Counter Input	Either of the 2 digital Inputs can be used as the Pulse Counter Inputs. Note that selecting the Digital Input has no effect until Analog Source in Analog Alarms page is selected as 'Pulse Counter Input'.
Pulse Counter Volume (Volume/ Pulse)	Is the amount of water flowing per each pulse. The value should be entered in this field and the pulse counter units should be specified.
Pulse Counter Units	Litres/Sec or Litres/min
Log Pulse Total	Check the box to allow the pulse counter to log totals.

Flow rate calculation:

1. Pulses/sec => Computed at the Digital Input
2. Volume/ Pulse => Entered in 'Pulse Counter Volume' setting.
3. Flow rate = (Volume/Pulse) * (Pulses/sec)

Based on the calculated Flow rate, follow the below steps and Analog Channels page to configure Pulse Counter Alarms.
Steps to Activate Pulse Counter Alarms:

1. Configure 'Pulse Counter Input' in Pulse Counters webpage. Enter Volume/Pulse and select Units.
2. Go to Analog Channels page and select "Analog Source" as "InterLINX® Pulse Counter 1/2".
3. Enter the Maximum Pulse Counter Flow rate in the Scale input section.
4. Configure High Threshold Alarm – The high threshold Alarm can be configured in the "Alarm Thresholds" section of the Analog Channels page, by enabling the "Upper Threshold" option. If the Flow rate is more than Upper Threshold, High Threshold Alarm will be triggered.
5. Configure Low Threshold Alarm – The low threshold Alarm can be configured in the "Alarm Thresholds" section of the Analog Channels page, by enabling the "Lower Threshold" option. If the Flow rate is more than Lower Threshold Voltage, Low Threshold Alarm will be triggered.

ANALOG CHANNELS PAGE

The InterLINX® WiFi has the option to configure/enable up to 8 analog input alarms.

All Analog Channel changes need the device settings to be unlocked to allow these change.

Alarm Name	The Title given to the Analog Alarms which by default is "Analog 1 to Analog 8". This can be changed to a title of choice if the device settings are unlocked.
Analog Source	Analog Alarms on the InterLINX® WiFi can receive their source analog signal from pulse counter and Modbus sources
Scale Input	This field is used to define the Units, Minimum value, Maximum Value, offset and Resolution values of the configured alarms. Note that all the options are not available for all Analog Sources (for example, we can't have a minimum value for the Pulse Counter analog source).
Upper Threshold:	
Alarm Activated Message	The text entered in this field is added to each of the Alarm Activation messages.
Threshold Value	If the input value is more than the value configured in this field, the Upper Threshold Analog Alarm will be triggered.
Reset Differential	This field is used to provide hysteresis, to ensure false alarms are not sent, when the input value oscillates between (Threshold Value + Reset Differential) value, no Lower Threshold Alarm Activation or Alarm Deactivation messages will be sent.
Activation Delay	If the Alarm state is Active for the Alarm Activation delay, the alarm activation message will be sent.
Deactivation Delay	If the Alarm state is inactive for the Alarm Deactivation delay, the alarm deactivation message will be sent.
Lower Threshold:	
Alarm Activated Message	The text entered in this field is added to each of the Alarm Activation messages.
Threshold Value	If the input value is less than the value configured in this field, the Lower Threshold Analog Alarm will be triggered.
Reset Differential	This field is used to provide hysteresis, to ensure false alarms are not sent, when the input value oscillates between (Threshold Value + Reset Differential) value, no Lower Threshold Alarm Activation or Alarm Deactivation messages will be sent.
Activation Delay	If the Alarm state is Active for the Alarm Activation delay, the alarm activation message will be sent.
Deactivation Delay	If the Alarm state is inactive for the Alarm Deactivation delay, the alarm deactivation message will be sent.

MODBUS CONFIGURATION PAGE

The InterLINX® WiFi can communicate with an external device using Modbus RTU protocol. A maximum of 4 Modbus devices can be configured at any one time. The baud rate, parity bits and stop bits of all the connected devices must be the same.

All Modbus Configuration changes need the device settings to be unlocked to allow these changes.

Name of Modbus Device	The unique name given to identify Modbus device 1 - 4
Device Type	Select a device type from the list of supported MATElec controllers or a generic device.
Slave Address	Add the device slave address. Note that two connected Modbus devices cannot have the same slave address. This will result in timeouts, Modbus errors or unexpected responses.
Send device Faults/Alarms	If this option is enabled, all the fault/alarm Modbus requests.
Pump Warnings	Pump Excess Run Hours and Excess Starts with adjustable trigger times.

RELAY CONFIGURATION PAGE

The InterLINX[®] LITE has 1 relay output which can be used to activate external functions.

All Relay Configuration changes need the device settings to be unlocked to allow these changes.

Relay Name	The Title given to the Relay which by default is "Relay 0". This can be changed to a title of choice if the device settings are unlocked.
Enable Relay Timer	If this option is enabled, the relay timed stop can be configured. Select the relay run time in hours, minutes and seconds. This will activate the relay for the set time and then return to the off position. Enabling the relay timer can only be done when the device is unlocked
Set Relay Output	This allows you to manually set the relay to on or off indefinitely or on for a set time in conjunction with the on timer.

FUNCTIONS

IOT FUNCTIONALITY

The InterLINX[®] WiFi communicates as an IoT device. All the configured faults and status information is communicated directly to the Propitect[®] Portal for viewing on a clients PC. Refer to the Propitect[®] User Manual for details on the interface functionality.



Free call: 1800 281 282

customer@matelecaustralia.com.au

www.matelecaustralia.com.au

HEAD OFFICE

PO BOX 7093 Shepparton VIC 3632
5 Telford Drive Shepparton VIC 3630