

uP3040 WLC Web enabled Logic Controller Lite

HIGHLY INTEGRATED

High Resolution Color Graphical Touch Panel interface with 14 I/O points, 2 Serial Ports, Integrated HID RFID Reader, and 5 integrated stacklight LEDs.

FLEXIBLE COMMUNICATION

Supports EtherNET/IP, DeviceNET, FL-Net, TCP/IP, and a host of others.

POWER SOURCE FLEXIBILITY

Dual Class II power sources from DC Supply or PoE. DC Barrel connection for 120/240Vac wall adapters.

COMPACT ROBUST DESIGN

Unit Measures 10" x 5" x 2" in a powder coated formed steel rugged enclosure.

FEATURES

- Digital Picking System
- Reduces Spares
- Reduces Training
- Multi-Page Color HMI

The uP3040 Web enabled Logic Controller is the third generation in a series of high performance, highly integrated Logic Controllers designed to replace more expensive systems requiring a separate HMI, Processor, Network Interfaces and multiple I/O points. The architecture is built on an open platform and leverages the ever increasing FOSS (Free or Open Source Software) model. Our freely available WAT programming API allows for easy integration into HTML/JavaScript and more object oriented programming languages. No cost provided sample software and tools allows the developers to implement and test applications on a standard desktop PC with easy deployment to the unit for production in mere hours.

- The high level of integration provides an HMI Interface, several Input/Output points and a powerful processor to carry out the majority of Logic Control tasks with no additional hardware. The high performance screen and touch panel interface provide a top quality user experience and supports both Full Motion and Static high resolution color images in an optimal 7" display.
- The compact design allows for the mounting of the unit within close proximity to an operator with minimal mounting hardware.
- Flexible communication is provided through two Network Data Paths, allowing segmentation of the "Time Critical" control functions from lower priority data gathering functions when needed. With a variety of choices available, the default port uses Ethernet RJ45 with PoE and the other port supports various fieldbusses.
- Multiple power sources allow for supply from a Class II 24Vdc supply or via an Ethernet cable fed from a PoE isolated mid-span power source. Using PoE further reduces wiring requirements, system complexity and cost.



uP3040 Front View



uP3040 Rear View

Technical Specifications

INPUT/OUTPUT OPTIONS

By design the unit has multiple I/O configurations that best suit your system needs.

CUSTOMIZATION

Our experienced design team is available for customizing a complete system solution using the uP3000 and your existing PLC's and Automation equipment. From development of an efficient System Architecture to customization and optimization of the unit firmware, we can deliver a reliable, maintainable and cost effective solution in a short amount of time.

Display

- Integrated LCD 800x480 16bits/pixel, contrast ratio 240, 320 nits
- Integrated 4-wire resistive touch screen
- Five (5) High Brightness LEDs Vertically aligned (Red, Yellow, Green, White, Blue, and an integrated Buzzer)
- Three (3) bicolour status LEDs for connection status
- Integrated HID® RFID Reader for Weigand badges

Input & Output Board

- Four (4) 24V NPN/PNP Inputs (non isolated)
- Two (2) 0-10V / 0-20mA Analog Inputs
- Two (2) 0-10V Analog Outputs
- Two (2) Optically Isolated Auxiliary Inputs
- Three (3) User Definable Dry Contact Relay outputs
- Two (2) RS232/RS485 ports for Bar Code readers or auxiliary use
- High speed RS-232 Serial Port
- One USB 2.0 high-speed Host Interface
- One USB 2.0 high-speed OTG Interface
- USB Host/Slave and USB OTG Host Connections
- Inputs for up to 4 tools or 3 area sensors
- Inputs are capable of monitoring battery voltage, temperature, pressure, flow, volume etc.

Processor Board

- Freescale® ARM 1136JF-S i.MX31 processor
- Memory : 64MB NAND flash, 2MB NOR flash
- Low-power 266 MHz DDR SDRAM memory 128 MB
- High speed SPI I/O channel interface to I/O Boards
- 16-bit stereo DAC, 13-bit ADC
- Stereo IN, Stereo OUT, HEADPHONE
- I2S compliant audio codec (Freescale MC13783)

Interfaces

- 10/100 Base-T Ethernet controller, with PoE (802.3af compliant)
- OPTIONAL: Isolated 5pin DeviceNet on Micro MDC
- OPTIONAL: Secondary Fieldbus interface

Software

- Linux 2.6.x
- WebKit under Qt/Embedded
- GStreamer for Audio/Video
- Real Time Automation CIP Stack

Network Protocols

- EtherNet/IP™ and DeviceNet™
- FLNet , ProfiBus, ModBus, etc.
- TCP/IP

Mechanical

- Weight: 2.2 lbs (1kg)
- Size: 10" x 5" x 2"
- Operating Temperature: -10°C to +60°C
- Storage Temperature: -40°C to +85°C
- Humidity : 40% non-condensing
- Enclosure Type : Formed 16gauge Steel
- Vibration: 5-17Hz, 0.1" double amplitude displacement 17-640Hz
1.5G acceleration peak to peak
- Shock:10G (11mS) peak-to-peak acceleration

Device Management

- On-Screen configuration
- Management Console (AxMC) supported on Windows® Vista™, Server 2003, XP SP2

Package Contents

- uP3K Device in ShipSafe packaging
- CD containing AXMC management software
- User and Installation Manual
- Warranty registration card

Warranty

- 1 Year Limited

ORDERING INFORMATION

DESCRIPTION	PART NUMBER	PRICE
uP3040 (basic unit)	AXM-UP3040-0000	Call
uP3050 (includes FLNet option)	AXM-UP3050-0000	Call
WAT Development Kit for UP3K Family products	AXM-UP3000-WAT	Call
ACCESSORIES	PART NUMBER	PRICE
Arm Mounting Kit		