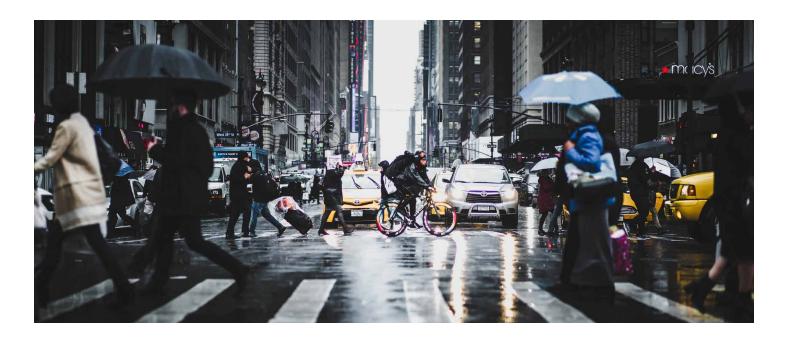
XN ITS CONTROLLER

ATC TRAFFIC SIGNAL CONTROLLER



OVERVIEW

The XN Controller is a modern workhorse for advanced traffic signal operations that sets the scene for the connected world.

Now available with a modern Velocity™ V5 ARM processor offering massively increased power and performance or a legacy PowerPC processor.

Its open architecture platform organizes and improves traffic signal operations while reducing the amount of equipment in traffic cabinets through multi-application support for things like:

- · Managing Ethernet traffic
- · Monitoring detection devices
- · Integrating with third-party devices

An OLED screen improves visibility in all conditions, during the day and at night.

Utilizing a Linux-based operating system that meets and exceeds current ATC and NTCIP standards, the XN Controller provides agencies with an industry leading, robust and scalable openarchitecture platform to meet transportation needs today and tomorrow.

BENEFITS

- · Fast, reliable intersection control
- Powerful CPU processor with expandable memory
- · Schedule updates or run live
- Install firmware and operating system updates without placing the controller in flash
- · Exceeds current ATC standards
- · Unrestricted use license for MIBs



ARM processor available



Built-in web server



Advanced edge/ IoT capabilities



Secure communication



MODERN PLATFORM

OPEN ARCHITECTURE

- · Linux operating system
- Linux and API library
- Software development kit (SDK) provided at no charge to qualified ATC software developers
- Unrestricted use license for NTCIP MIBs

USER INTERFACE

- 128 x 256 pixels OLED display (16x40 characters)
- · 4x4 and 3x4 tactile keyboards

COMMUNICATION INTERFACES

- 10/100 Mbit Ethernet ports (4)
- USB (3)
- · AUX Serial (1)
- SD Card (1)
- External SDLC port (TS 2 detection devices only)
- · C12S SDLC/HDLC (ITS/ATC cabinets)
- RS232 external serial port (1)
- RS232 ASYNC consol port (1)
- Integrated GPS/GNSS

INDUSTRY STANDARDS

- · ATC 5201, current
- ATC API 5401
- NTCIP 1201, 1202, and applicable base standards

TECHNICAL SPECIFICATIONS

Form factor: Shelf or rack mount

Dimensions* Rack Mount (HWD): 7" x 18.8" x 7.8"

17.8 x 47.8 x 19.8 cm

Power: AC 90-135V, 60Hz±3Hz, 1.3A max.

1Ø Phase

Power connector: Standard power cord

Temperature: -40°C to +80°C

* Dimensions rounded to nearest 0.1

ON-BOARD WEB SERVER

Secure, modern communications for traffic operators to access controller functions wirelessly or via wired Ethernet connections from any internet-enabled device (smart phone, tablet, laptop).

- 40 phases, 16 rings, 32 overlaps, 16 preempts
- HTTPS communication between device and Q-Free central system
- · Advanced functionality comes standard
 - Master/closed loop
 - Peer-to-peer communications
 - Transit signal priority

See MAXTIME ic product sheet for more details.

PROCESSING & MEMORY

ENGINE BOARD CPU SPECIFICATIONS*		
	Velocity V⁵ ARM	Legacy PowerPC
Processor:	Quad-core	NXP MPC8248
	1.6 GHz ARM Cortex A53 CPU	32-bit, 400 MHz
	with 800 MHz ARM Cortex M7 coprocessor	PowerPC Instruction
Neural Processing Unit for AI/ML:	V	_
DRAM:	4,096MB (4GB)	128MB
Flash memory:	32,768MB (32GB)	64MB
Industry standards:	Meets/Exceeds NEMA and ATC standards	Meets/Exceeds NEMA and ATC standards

^{*} All models fully hardware and software compliant with the latest ITE/NEMA/AASHTO ATC standard

