

SWARCO ATC FLeX[®] II CONTROLLER



The ATC FLeX II Controller builds on the success of our widely adopted FLeX controller series. The ATC FLeX II Controller is designed to operate in any ATC, Caltrans, and NEMA cabinet and exceeds the ATC 5201 Standard. The rugged and powerful controller is available in shelf and rack mount versions, and is equipped with advanced interfaces and 10 times the computing power to support future software advancements.



KEY BENEFITS

- Utilizes the split screen to display operations status while editing the database configuration
- Ensures compatibility with ATC, Caltrans, and NEMA TS1, TS2 Type 1 and 2 cabinets
- Maximizes space in signal cabinets with compact form-factors, allowing for additional equipment or smaller cabinet footprints
- Maximize the reliability of SWARCO's renowned hardware by pairing it with Omni eX[®] Intersection Control or third-party controller software¹

PRODUCT DESCRIPTION

The ATC FLeX II Controller is equipped with an oversized, 7", full-color LCD resistive touch screen display, with up to 250 lumens, making the screen legible in all conditions.

The controller's front panel design makes it easy to connect, program, and update the unit in any environment. Quick data transfers, firmware upgrades, and log retrievals can be completed via USB port directly from the front panel. Integrated wireless connectivity allows users to access local software through a web interface.

The ATC FLeX II Controller has a robust Linux operating system that provides a flexible, open-architecture that can support software from multiple vendors. For applications including intersection control, ramp metering, or reversible lane control, check out our Omni eX Intersection Control Software.

ATC FLeX II CONTROLLER

ENGINE BOARD

Engine Board 6

- Linux Kernel: 6.6.52
- Processor: LS1043A, 1.6GHZ
- Main Memory: 4 GB, 32bits, 1600MT/s
- Nor Flash: 256 MB
- Nand Flash: 1 GB
- SRAM: 2 MB
- Ethernet ports: 2 ports 10/100/1000 Mb/s
- USB ports: 1 port USB 2.0 and 2 ports USB 3.0
- Special connector: McCain Connector

APPLICABLE STANDARDS

- NEMA TS 2-2021 v03.08
- ATC 5201 Advanced Transportation Controller Standard v06A

OPTIONS

- Standard and Customer D Connectors (Caltrans/ McCain, EPAC DB37, Traconex, PEEK DB25, LMD9200)
- Input Voltage: 250 VAC, 50/60 Hz (±3 Hz)

INTERFACES

Communication Interfaces

- NEMA Port 1 (SP3S) and C12S Serial Port (SP3S and SP5S)
- ENET 1: 10/100/1000 Mbps Ethernet switch, 2 front-mounted RJ45 ports
- ENET 2: 10/100/1000 Mbps Ethernet switch, 2 front-mounted RJ45 ports
- Wi-Fi, GPS and cellular
- Expansion Slot (Future co-processor, communications interfaces, etc.)
- Console Port(s): RJ45
- External antenna headers for WiFi, GPS, and cellular

Front Panel Interfaces

- Display: 7", full-color, resistance touch screen
- Keyboard: 7 x 4 keypad (28 key)
- USB 2.0 Ports (2)
- USB 3.0 ports (2)
- SD Card Slot

Cabinet Interfaces

- ATC Cabinets
- Caltrans Cabinets
- NEMA Cabinets

SOFTWARE

Compatible with Omni eX Intersection Control Software as well as multiple third-party ATC Controller software.

GENERAL SPECIFICATIONS

SPECIFICATIONS

Form Factor:	Shelf Mount	Rack Mount	Shelf Mount	Shelf Mount
Compatibility:	ATC Cabinet	Caltrans	NEMA TS 2 Type 1	NEMA TS 2 TYPE 2
Dimensions ² :	12.5"W x 7.01"H x 7"D	19"W x 7"H x 7"D	12.5"W x 7.10"H x 7"D	12.5"W x 10.10"H x 7"D
Power:	85 VAC to 135 VAC, 60 Hz (±3 Hz)			
Environment:	Operating Temperature: -37°C to +74°C Humidity: 0 to 95% (non-condensing)			
Weight:	5.7 lbs	6.6 lbs	5.8 lbs	8.25 lbs

VIEW

Front:



¹Seamlessly integrated using ATC 5201 standard drivers and architecture

²Dimensions rounded to the nearest .01"