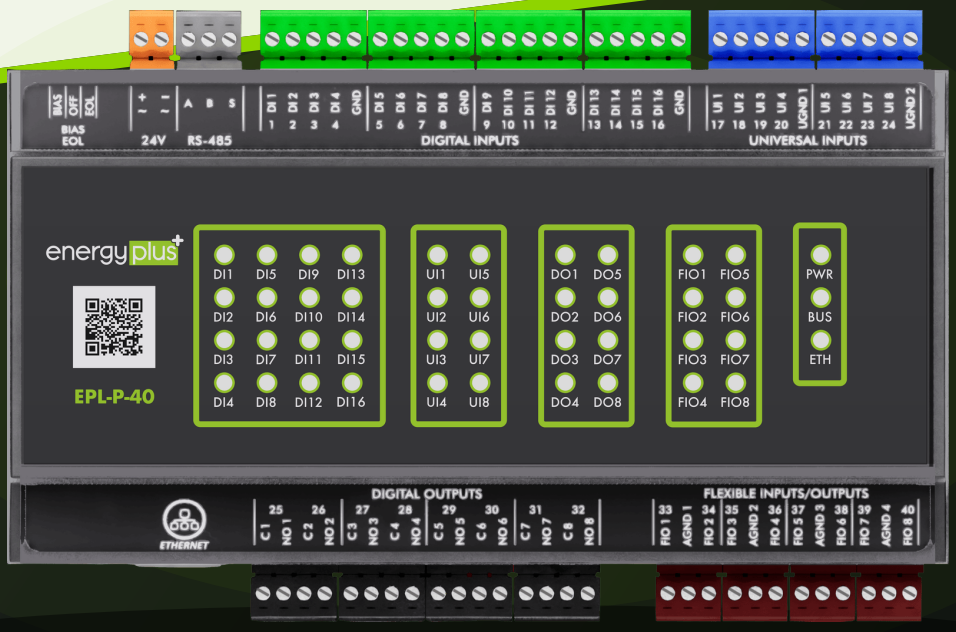
energyplus

EPL-P-40

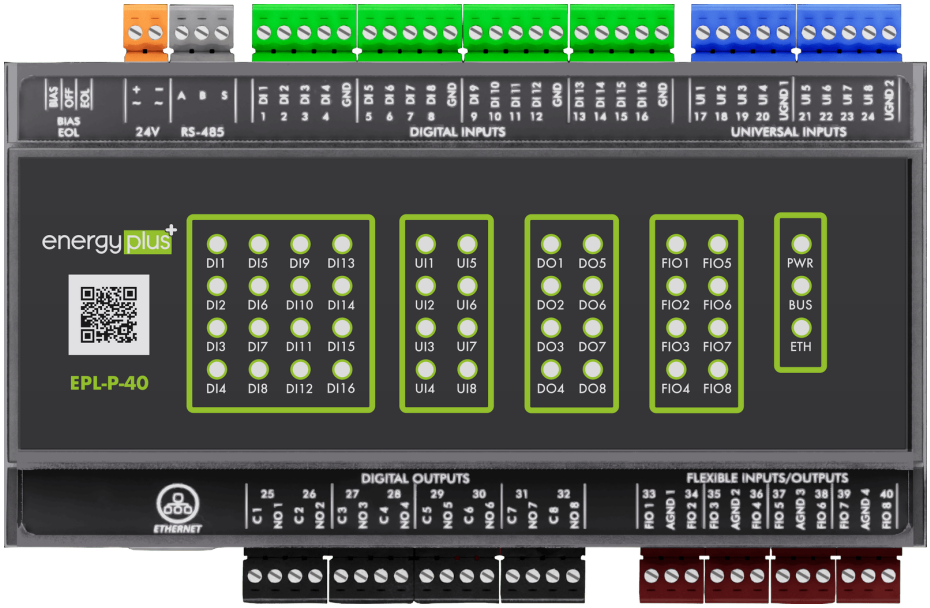
Product Brochure

Sedona-based 40-point application controller

Firmware V2.0.3 | October 2026



EPL-P-40 is a DIN-rail controller platform that runs local control logic on the device and manages field I/O points with a Sedona application.



Product Description

EPL-P-40 is a Sedona-based controller platform that runs field I/O points together with a local control application. The control logic runs on the device; application links, point behavior and service workflows are configured to suit the project requirements.

This architecture is used for control scenarios that make decisions in the field rather than only collecting I/O. The application links the DI, UI, DO and FIO points on the device to Sedona blocks and runs Modbus, BACnet and MQTT communication within the same application. Commissioning and maintenance are managed with Workbench, web, BLE and Niagara driver tools.

Control and Programming

Item	Use
EnergyPlus Workbench	Live wiresheet programming over a SOX session, block/link editing, runtime monitoring and service package management.
SOX network	Live access to the controller application, component/slot/link monitoring and the application maintenance connection.
Eplus-RT	Runtime driver module that carries the device, point, schedule and SOX gateway/tunnel objects in a Niagara station.
EnergyPlus Niagara modules	Direct device programming in Niagara N4 with Sox Connection from the Open Device menu; on the station side, device/point discovery through the driver, live SOX access, Wire/Slot/Link Sheet programming, Application Manager, Backup/Restore Tool, Kit Manager and automation system integration.
Web and BLE	Network settings, channel engineering, live monitoring, file operations, software update and field access.

I/O Capacity

Channel	Count	Use
DI (1..16)	16	Digital monitoring; pulse/counter applications on the first four channels.
UI (17..24)	8	Voltage, current, digital contact, NTC/PT/NI temperature sensor and resistance input.
DO (25..32)	8	Relay output; field outputs driven by the control application.
FIO (33..40)	8	Flexible input/output (UO): 0-10 V / 2-10 V analog output, digital output or digital input.

Commissioning

1. Complete the power supply, Ethernet, RS-485 and I/O connections.
2. Access the device through web, BLE or EnergyPlus Workbench.
3. In the SOX session, verify the active Sedona application, kit compatibility and point links.
4. Test live values, commands, schedules and communication on the wiresheet; save the verified application persistently.
5. If required, complete point discovery, Wire/Slot/Link Sheet programming, provisioning and integration through a direct Sox Connection from the Niagara N4 Open Device menu or through the station driver workflow.
6. At project handover, keep the application package, backup, kit list and service records.

Communication and Service

Interface	Use
Ethernet	Web interface, Workbench/SOX access, file operations and software update; Modbus TCP, BACnet/IP and MQTT communication.
RS-485	Modbus RTU master or slave, BACnet MS/TP or application-specific serial communication.
Modbus	Modbus TCP/RTU master and slave components within the Sedona application.
BACnet	BACnet/IP and BACnet MS/TP; router with an optional license (IP and MS/TP simultaneously, with routing between them).
MQTT	Broker connection; optional TLS.
SOX	Live access to the Sedona application and the commissioning connection.
Niagara	With the EnergyPlus Niagara modules driver family, station-less programming with Sox Connection from the Open Device menu, or point discovery, live programming, provisioning, service and supervisory system integration through a station.
BLE	First access, field monitoring and selected service operations.

Technical Specifications

Specification	Value
Local I/O capacity	16 DI (DI1..DI4 counter inputs), 8 UI, 8 DO relay outputs, 8 FIO (flexible input/output)
UI measurement resolution	22 bit
Communication interfaces	1 × Ethernet RJ45 (10/100 Mbit/s), 1 × RS-485, Bluetooth LE (service and commissioning)
BACnet vendor ID	1600 (registered with ASHRAE)

Specification	Value
Supply voltage	24 Vac ±20% or 21..30 Vdc
Nominal power consumption	5 VA
Supply class	Class 2
Protection and temperature class	IP20 enclosure protection, T50 operating class
Operating environment	0..50 °C, 5..95% relative humidity (non-condensing)
Storage environment	-20..70 °C, 5..95% relative humidity (non-condensing)
DO relay output rating	5 A @ 277 Vac or 3 A @ 30 Vdc, resistive load
FIO analog output range	0..10 V or 2..10 V selectable; maximum load current 20 mA per channel
Mounting	DIN rail (EN 60715, 35 mm), cabinet mounting
Enclosure dimensions (width × height × depth)	175 mm × 112 mm × 60 mm

Application Areas

Area	Use
Mechanical automation	Control of AHUs, pumps, boilers, chillers and auxiliary equipment.
Local control	Decision-making on the device with schedule, logic, math and control blocks.
Energy management	Combined operation of metering, alarm, status monitoring and control scenarios.
Cabinet automation	I/O, application logic, service access and software maintenance workflow in a single device.
Niagara integration	Monitoring and programming device points through a station and bringing them into the automation system.

Handover Documents

For projects, keep the datasheet, user manual, application backup, kit list, Workbench screenshots, Niagara integration notes, wiring diagrams and mechanical dimension drawings together.

Company Information

Item	Information
Brand	EnergyPlus
Product website	www.energyplusstore.com