

— PRODUCT DEEP-DIVE

Olympus.

The Local Circuit Monitor that satisfies NFPA 7.9.2.3 at the panel.

Olympus is the device that turns single-circuit egress failure into a code-compliant event at the device level. It mounts adjacent to the lighting circuit panel (or up to 1000 ft from the cabinet), senses utility power on every emergency-mode branch circuit, and signals the Sage central battery on a 12 V Class 2 loop within milliseconds. The right zone transitions to emergency — the rest of the building stays on utility AC.

ms

TRANSFER SPEED

Up to 1000 ft

DISTANCE FROM CABINET

Class 2

WIRING

NFPA 7.9.2.3

CODE CLAUSE

WHAT IT IS

A panel-side sensor that turns code into a device.

Olympus is a small, hard-mounted device that lives in the electrical room near the lighting circuit panel. Each Olympus monitors a set of branch circuits — typically every emergency-mode branch on the panel. It senses utility AC on each monitored branch continuously. The moment a branch loses power — single circuit, single phase, anything at all — Olympus signals the Sage central battery cabinet on a low-voltage 12V loop. The cabinet activates DC emergency power on the affected fixtures within milliseconds.

The wire run from Olympus back to the cabinet is **Class 2 low-voltage, up to 1000 ft.** That means the cabinet can live in a service room across the building (or a floor below), and Olympus units can sit wherever the emergency lighting panels are. One Olympus monitors a panel; multiple Olympus units can connect to a single cabinet, scaling the system to a full building's worth of branches.

— NFPA 7.9.2.3

The clause every emergency-lighting system has to satisfy — and how most don't.

NFPA 101 §7.9.2.3 requires emergency illumination to activate “upon failure of the normal lighting in the affected zone” — even if the rest of the building still has utility power. Single-circuit egress failure. Code-mandated. Architecturally non-trivial.

WITHOUT A DEVICE LIKE OLYMPUS

Compliance is theoretical.

Inverter systems and central panel-board approaches sense utility at the system level, not the branch level. Lose a breaker on one floor and the inverter doesn't know — building still has AC overall. The egress in that zone goes dark. Compliance check fails the moment an AHJ actually tests the clause.

WITH OLYMPUS

Compliance is a device.

Olympus senses every emergency-mode branch separately. Lose that breaker on one floor and Olympus signals the cabinet instantly — DC emergency goes to that branch and nothing else changes. The AHJ's breaker-pull test passes because the system was designed for the test.

MILLISECOND TRANSFER

No generator. No 10-second dark window.

NEC's 10-second-max-dark window allows a 10-second gap between utility failure and emergency illumination. That gap exists because generators take ~10 seconds to start. For most buildings, ten seconds in the dark is the design ceiling.

Sage clears that ceiling structurally. The DC source — the Sage central battery cabinet — is already energized. Olympus sensing is continuous. When utility AC drops on a monitored branch, the signal lands at the cabinet in milliseconds. The cabinet's solid-state transfer activates the DC feed before an occupant sees a flicker.

Practical implication: the project removes the generator-bridging conversation from the egress-lighting architecture entirely. Use a generator where you want for elevators, HVAC, life-safety pumps — but the emergency lighting design doesn't depend on it.

INSTALLATION ENVELOPE

Class 2 wiring. Up to 1000 feet. Wherever the panel lives.

Olympus is built for the realities of commercial-building electrical rooms — not laboratory ideal conditions. The wire budget gives the engineer freedom to place the cabinet where it serves the building best.

WIRING CLASS

DISTANCE BUDGET

Class 2 low-voltage

12 V control signal back to the cabinet. No conduit required by code, no high-voltage runs, no special bend-radius rules. Same MC family the rest of the Sage system uses.

PLACEMENT

Adjacent to the panel

Olympus mounts in the electrical room with the lighting panel it monitors. Wiring taps are at the breaker side, so the install motion is the same as any panel-side current sensor.

Up to 1000 ft

Cabinet in the basement service room can monitor panels on every floor of a typical mid-rise. Larger buildings use multiple cabinets, each with its own Olympus set.

— HOW OLYMPUS FITS

Cabinet → Olympus → Relay → Fixture.

The Sage system has four parts in a deliberate chain. The cabinet holds the energy. Olympus watches the panel for failure. The relay translates DC power into LED illumination at the fixture. The fixture is whichever luminaire suits the architectural intent.

Olympus is the trigger that makes the chain code-aware. With one Olympus per emergency-mode panel, the system meets NFPA 7.9.2.3 by device — there's no "the building should know if a breaker tripped" ambiguity, no generator- transition gap, no central-inverter blind spot. Every branch that matters is watched, all the time.