Scan Spaces in Minutes. 3D Models Made with Your Phone.
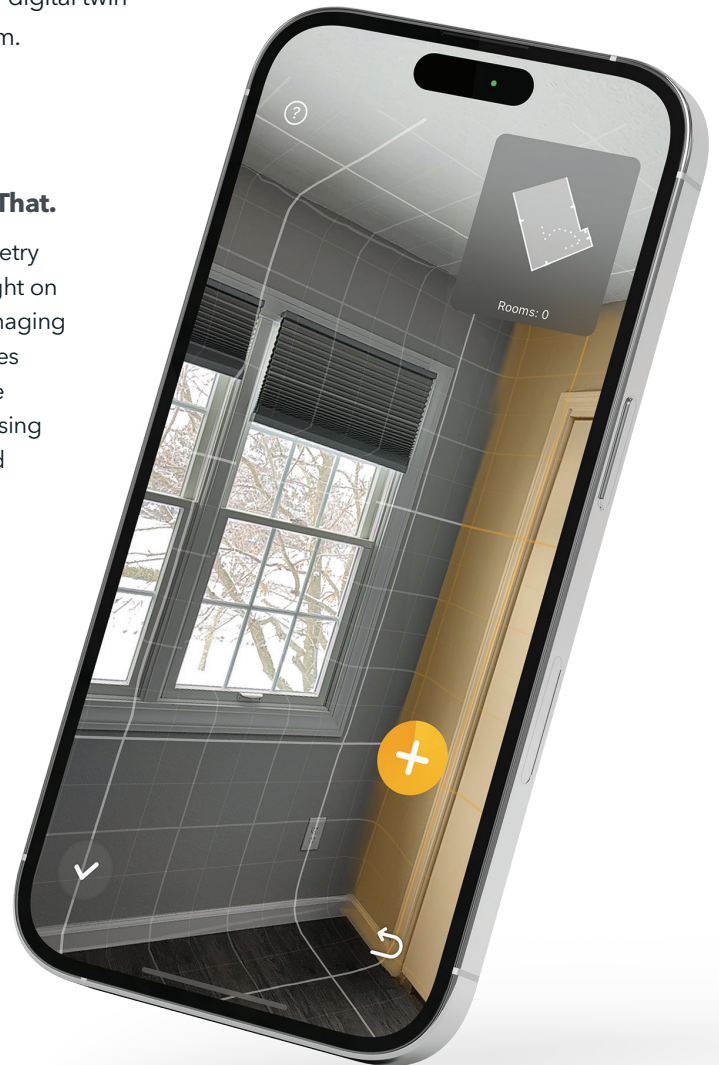
Quantum Lens

Many buildings don't have up-to-date floor plans, much less 3D models. This presents a significant hurdle when undertaking a retrofit project, completing renovations, sharing data with other stakeholders, or tracking a building's energy use. The PassiveLogic® Quantum Lens™ app is your new best friend for generating 3D digital twin models of existing buildings and solving this issue. Leveraging the lidar technology found in newer Apple iPhone Pros, the Quantum Lens app enables users to quickly scan buildings into digital twins without needing any additional hardware. Define rooms, capture objects and sensors throughout the space, and adjust scans within one convenient mobile app—all while a Quantum® digital twin instantly generates and syncs across the entire PassiveLogic ecosystem.

Digital Twins for Buildings. The App for That.

The Quantum Lens app converts raw scan geometry into a physics-based 3D Quantum digital twin right on your phone. Using point cloud data instead of imaging ensures the privacy of both individuals and spaces being scanned. Since everything happens on the phone as it scans, there's no long wait for processing in the cloud. You can edit the building as needed by updating scans in the app or by using the PassiveLogic Building Studio™ web app on a computer. Unlike similar scanning apps, you can refine the model after processing.

Capture What Matters. Scan Anytime.

The Quantum Lens app can capture everything from closets to warehouses to high-rise office buildings—all with a high level of detail. Designed to scale quickly, this app lets you scan up to 100,000 square feet in just one day. The digital twin ignores irrelevant objects or people in the space, so users can scan without interrupting occupants. Swipe the screen to indicate where the walls are, and the app figures out the rest. The Quantum Lens app then processes the raw scan data to accurately define a building's zones and spaces.
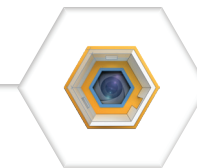
Quantum Lens

Smart Asset Tracking. Super Fast Commissioning.

The Quantum Lens app automatically recognizes a growing list of equipment and objects, and you can manually add points of interest (POI) to your model. Simply tap the POI menu mid-scan to capture assets and equipment. When an asset POI is added to the digital twin model, it automatically includes its geolocation within the building, and you can tag it with a name, a photo, and other useful information. With POI you can also quickly set up and commission PassiveLogic devices. For example, Quantum Lens recognizes a Sense Nano™ sensor, guides you through the 30-second commissioning process, then quickly and securely connects it to the PassiveLogic network. Once connected, you can view and track the environmental data the sensor captures in the app.
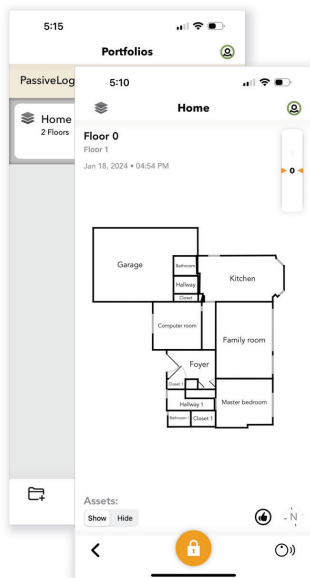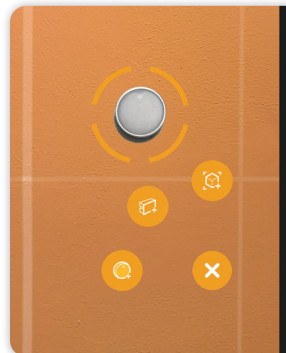
## One Digital Twin.
Use Cases for the Whole Life Cycle.

QuantumSync™ cloud automatically and instantly saves digital twin scans to your project portfolio, making them accessible in other tools and to other contributors in the PassiveLogic ecosystem. This provides a continuous workflow allowing architects, engineers, designers, and installers to collaborate more efficiently. Engineers can access the digital twin in Autonomy Studio™ to generatively create control diagrams and wiring schematics for controls and other equipment.

Data in Your Pocket. Mobile Digital Twin Wallet.

With scans completed and sensors connected, the Quantum Lens app transforms your smartphone into a hand-held dashboard, monitoring device, and digital twin wallet. Manage maintenance and work orders, make simple edits and additions to a digital twin as it evolves, tap on sensors for real-time data on performance, make notes for later, and securely synchronize data between the cloud and offline systems.

Instant Scan to Digital Twin
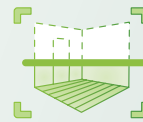
Large-Scale Models

Window & Door Recognition

Wireless Mesh Provisioning

Out-of-band Wireless Security

Architectural Drift Compensation

On-device AI Processing

System Commissioning

Scan to Digital Twin

Control Equipment Commissioning

100,000 ft² in One Day

Sensor Dashboarding

Building Inspection

Bidirectional QuantumSync

Air Gapped System Management

AR Insights

Digital Twin Wallet
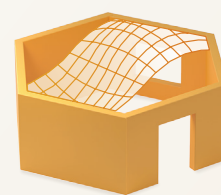
Analytics AR

Offline System Tools

Location Trilateration

Secure Digital Twin Management