

PowerHUBB PoE Lighting: Project Planning Stage Checklist

This checklist is intended to be used with the planner/designer of the facility with the intent of installing and utilizing the PowerHUBB, PoE Lighting Control system. These items are aspects that need to be addressed prior to installation of the fixtures, control inputs or infrastructure components to ensure success.

1. Determine Fixture Schedule Strategies

A. Will fixture power levels allow for daisy-chaining of fixtures?	
B. Will node mounting strategy be OEM or field mounting?	
C. Is sensor and wall control connection strategy daisy-chain node or fixture to node? (Install Recommendation: Only daisy chain fixtures and devices within the same room)	

2. Determine PoE Power Sourcing Equipment (PSE) Installation Strategy

Select an installation strategy, considering pros/cons of each:	
A. Centralized (Data Rack in IDF/MDF closet) New construction, large structures <i>Example:</i> Large office building Data closet connections (fiber vs. copper)	
B. Distributed (Example: Cisco CDB-8U PoE switches) Clusters, retrofit structure <i>Example:</i> Multi-tenant building (condos) Plenum mounted	
C. Hybrid: Version of Central and Distributed	
D. Verify PSE devices are properly sized to to function with a full load.	

3. Define PoE Cabling Requirements

A. 60W/Port <i>Minimum:</i> Cat5e (24AWG) <i>Recommended:</i> Cat6 (23AWG) or better	
B. 90W/Port <i>Minimum/Recommended:</i> Cat6 (23AWG) or PoE-Specific 22AWG Structured Cable <i>Recommended:</i> Cat5e/6 vs. Cat6A	
C. Length Limit: 328 ft/100 m <i>Recommended:</i> 300 ft/90 m from data closet to fixture, which accounts for additional length due to service loops, patch panel, etc.	

4. Define Data Closet (IDF/MDF) Requirements

A. RU required per closet	
B. Fixture/home run count to closet <i>Install Recommendation:</i> Only daisy chain fixtures and devices within the same room	
C. Patch Panels and Network Switches	
D. Available Closet Space	
a. Additional space for inverter(s)	
E. HVAC considerations (BTU calculations)	
F. Power requirements	
a. Source voltage(s) vs. equipment voltage range	
b. Normal Power loads vs. Emergency (EM) loads	
c. EM power requirements: UPS or Inverter/Generator	
d. AC vs. DC power	