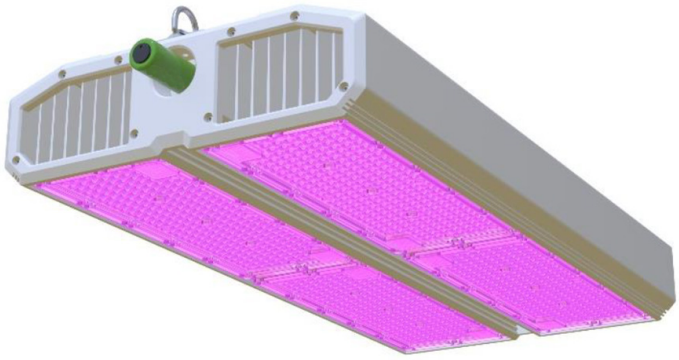
MESHIQ

SEAMLESS, WIRELESS LIGHTING CONTROL

P.L. LIGHT SYSTEMS

THE LIGHTING KNOWLEDGE COMPANY

P.L. Light Systems' MeshIQ Wireless Control System enables seamless integration with existing climate control systems for MeshIQ-enabled models of the ParFX Ultra, through a wireless mesh network—offering growers complete and reliable wireless control of their lighting and energy savings.



MeshIQ-enabled ParFX Ultra luminaire

KEY FEATURES & BENEFITS INCLUDE:

- Lighting control, seamlessly integrated through a wireless mesh network
- MeshiQ Gateway boasts a Wireless Operating Range of up to 1000ft. (line of sight)
- Seamless integration with the Horti Lighting Protocol (HLP) of existing climate control systems—offering complete control over reliable and cost-effective energy savings
- Simple to install, commission and maintain
- Available for MeshIQ-enabled ParFX Ultra luminaires

TECHNICAL SPECIFICATIONS†	
Electrical	100-240V / <4.8W
Control Protocol	Modbus TCP/IP and LoRaWAN
Radio Frequency	915 MHz
Wireless Range (Gateway)	≤ 1000 ft. (305m)
Transmitting Power	<30 dBmS
# Independent Channels	4
Environment	45°C Max. Ambient Operating Temperature; 10% - 95% non-condensing humidity
Warranty	5-Year Limited Warranty

†Accurate to ± 10%

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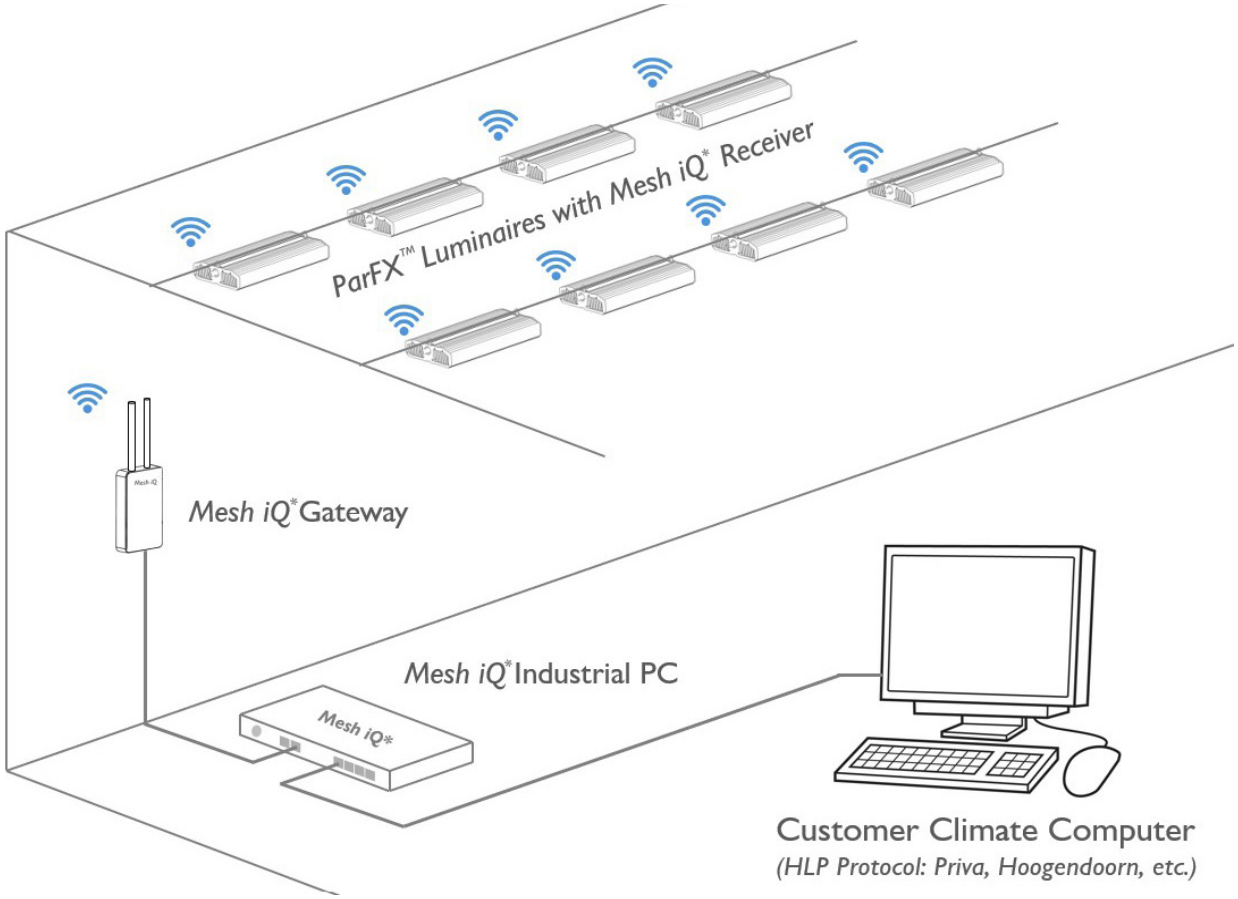
How It Works



- The customer's Climate Computer (with HLP protocol module enabled) transmits a communication signal to the MeshiQ Industrial PC using either the supplied ethernet cable, or the customer's own optical fibre cable that adheres to Modbus TCP/IP standards.

- The Industrial PC then transmits the Modbus TCP/IP signal to the MeshiQ Gateway, also through a supplied ethernet cable (or customer's optical fibre cable).

- The Gateway then converts the Modbus TCP/IP signal into a digital signal that is wirelessly transmitted to the MeshiQ Receivers (dongles) in the luminaires—enabling comprehensive coverage of the LoRaWAN wireless mesh network within the control area.

- The Receivers are individually programmable—allowing for the creation of luminaire groups to facilitate zonal control.