

ADVANCED ROOFTOP UNIT CONTROLS SIDE-BY-SIDE COMPARISON

Note for Utilities: This document is designed for utilities to show both trade allies and end-users how the benefits of advanced rooftop unit controls compare to standard controls. If you choose to copy and paste this document, please remove the header.

Standard Controls	ARC Lite	ARC Full
✓ Single-speed fan, which often provides more airflow than necessary, resulting in wasted energy and excessive equipment cycling.	✓ Multiple fan speeds to better match the airflow to the system demand.	✓ Multiple fan speeds to better match the airflow to the system demand.
✓ Fixed economization temperature, which does not maximize free cooling opportunities.	✓ Fixed economization temperature.	✓ Integrated economizer control to maximize free cooling.
✓ Fixed outside air ventilation rates that are often either too high and waste energy, or too low and cause poor indoor air quality.	✓ Fixed outside air ventilation rates.	✓ Demand control ventilation (DCV), which saves energy and ensures high indoor air quality.
N/A	✓ Improved occupant comfort.	✓ Improved occupant comfort.
N/A	✓ Reduced equipment wear.	✓ Remote programming, scheduling, monitoring, and alarms. *
N/A	N/A	✓ Fault detection and diagnostics (FDD). *
N/A	N/A	✓ Reduced equipment wear.

The incentive for an ARC Full retrofit on a 10-ton RTU is \$2,000. The simple payback period after including the incentive is estimated to be between 3 to 6 years depending on how often the building is occupied and what type of heating the RTU has.

*This is not a requirement for ARC retrofits; however, many of the prequalified ARC systems have this capability.