Release Note and Certificate of Compliance
Field Upgrade SU780XLE 2020-1
October 2020

This field upgrade will improve engine performance at warmer set points, enhance inverter performance and augment existing functionality to autonomously monitor and maintain freezer operation. This upgrade is applicable to all freezers manufactured since July 2019, from Serial Number 19070-10069 to Serial Number 20090-13064.

The details of the field upgrade are:

Beaglebone Black CPU Image
XLE_release.200925.image
- Added with BACnet/MQTT connectivity.
- Allows future upgrades to BACnet/MQTT connectivity to be made remotely.
- Allows future upgrades to the following firmware to made remotely.
    - Graphical User Interface
    - Control

Graphical User Interface Firmware
GUI 1.2.7
- Current shipping version (1.2.5)
- Event log error addressed

Control Firmware
Ctrl 1.40
- Current shipping version (1.38)
- Invertor enable fault added
- Warm head thermistor fault improved

Invertor Firmware
INV 1.37
- Current shipping version (1.37)
- Compatible with latest invertor printed circuit board
- Backward compatible with earlier boards

IO Board Firmware
IO 3.3
- Current shipping version (3.3)
- PIC watchdog firmware enabled

Certificate of Compliance

StirlingUltracold Model SU780XLE

Field Upgrade SU780XLE 2020-1

This Certificate of Compliance certifies that firmware releases contained in this release:

- have no change or adverse effect on temperature mapping of the freezer,
- have no change or adverse effect on pull-down timing to the established set-point of the freezer,
- have no change or adverse effect on temperature control of the freezer.

Should you have any questions regarding the Certificate of Compliance, please contact Technical Services at 855-274-7900.

Date 10/08/2020

Dusty Tenney
President
Stirling Ultracold