

# UP3 ROUTINE VISUAL INSPECTION

## 1 Purpose

To perform a general routine visual inspection on every UP3 unit to verify overall build quality, workmanship, and conformity to safety standards.

## 2 Scope

This mandatory routine test applies to 100% of UP3 units at the final assembly stage.

## 3 Procedure

Inspect the unit systematically before the top cover is installed, unless otherwise noted.

### 3.1 Chassis & external fittings

- A. Enclosure: The UP3 enclosure is free from significant cosmetic defects.
- B. Cable glands: All three cable glands are present and correctly installed.
- C. Earth connection: Verify the cable lug, external tooth washer, and M5 nut are all present and correctly assembled on the external earth stud.
- D. Labels: The general product and serial number labels are present, straight, and legible.

### 3.2 Internal assembly

- A. Main board mounting: The main board is secured with all three M3x4 screws.
- B. Light pipe: The light pipe is present and correctly seated on the main board.
- C. Workmanship: No obvious signs of poor soldering or misplaced components on the board.
- D. Wiring: All internal connectors are fully seated. Wires are not pinched, strained, or damaged.
- E. Battery: The battery is installed, but its connector is NOT CONNECTED to the main board.

### 3.3 Insulation system verification

- A. Foreign object debris (FOD): Verify that the unit is free from loose conductive material (e.g., wire clippings, solder balls, stray hardware). Check both sides of the main board.
- B. Clearance: Use the designated clearance gauge to confirm that required clearance distances are maintained. The unit passes if the gauge can be fully inserted without application of undue force. If the gauge cannot be inserted fully or requires excessive pressure, the unit fails the clearance check.

### 3.4 Final closure

- A. Cover check: Verify that the cellular rubber pad is correctly attached to the inside surface of the enclosure cover.
- B. Secure enclosure: Fit the cover, ensuring no wires are trapped, and secure it with the M4x6 screw.

## 4 Acceptance criteria

**PASS:** The unit passes if all checkpoints (3.1 through 3.4) are met.

**FAIL:** The unit fails if any non-conformance is found. The unit must be immediately segregated for rework and the defect documented.

## 5 Results

The inspector must sign the production traveler for each unit to provide evidence that this routine test was completed and passed.

|     |                                | PASS | FAIL |
|-----|--------------------------------|------|------|
| 3.1 | Chassis & external fittings    |      |      |
| 3.2 | Internal assembly              |      |      |
| 3.3 | Insulation system verification |      |      |
| 3.4 | Final closure                  |      |      |

Unit serial number: \_\_\_\_\_

Date: \_\_\_\_\_

Notes: \_\_\_\_\_

Inspector's signature: \_\_\_\_\_