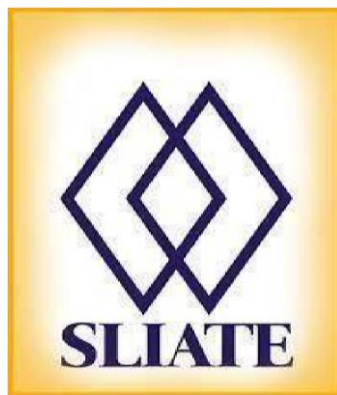


SRI LANKA INSTITUTE OF ADVANCED TECHNOLOGICAL EDUCATION

Test Case

Gas Leakage Call and Alert System



Advanced Technological Institute – Anuradhapura

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|-----------------------|--|----------------|-------------------------|
| Test Scenario ID | GasAlert-1 | Test Case ID | GasAlert-1A |
| Test Case Description | Gas Leakage Detection – Alert System Test | Test Priority | High |
| Pre-Requisite | System powered ON, GSM module connected, Gas sensor calibrated | Post-Requisite | System reset after test |

Test Execution Steps:

| Serial No | Action | Inputs | Expected Output | Actual Output | Test Result | Test Comments |
|-----------|-------------------------------------|--------------------------|---|--|-------------|--------------------------|
| 1 | Power ON the system | N/A | Power LED turns On, system initializes | Power LED on, Serial monitor logs shows bootup | Pass | System boot verified |
| 2 | Simulate gas leakage (use test gas) | Apply test gas to sensor | Serial monitor logs: Gas Leak Detected | Serial monitor logs: Gas Leak Detected | Pass | Gas detected verified |
| 3 | Send alert message (SMS) | N/A | Serial monitor logs: Send SMS to 0761088005, received: “Gas Leak Detected”! | Serial monitor logs: Send SMS to 0761088005, received “Gas Leak Detected”! | Pass | SMS detection verified |
| 4 | Simulate an incoming call | N/A | Serial monitor logs: Calling 0761088005, Received call | Serial monitor logs: Calling 0761088005 | Pass | Call detection verified |
| 5 | End the call | N/A | Serial monitor logs: “Call ended” | Serial monitor logs: “Call ended” | Pass | Call terminated verified |