



Technical Note

Title: Hycal probe simulator
Report No.: TN0336
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Issue: 2

Background

The Hycal probe simulator (HYC.AZR.UNI.DEV.801) generates artificial probe signals (voltage, temperature, impedance) to enable checking of Hycal analysers and probe cables.

Prerequisites

- i. Hycal analyser
- ii. Probe cable
- iii. Hycal probe simulator

Instructions

1. Switch the Hycal analyser on
2. Connect the probe cable between the Hycal analyser and the probe simulator
3. Switch the probe simulator on
4. Verify that the green LED on the probe simulator lights then pulses, confirming that the battery level is OK (if the red LED pulses then the CR2032 battery level is too low and must be replaced before continuing)
5. On the Hycal analyser navigate to Main menu -> Diagnostics
6. Verify that the displayed values for Temperature, Sensor voltage, and Sensor Z are stable and within the limits shown on Table 1
7. Switch the probe simulator off

Signal	Units	Nominal value	Bottom Limit	Top Limit
Temperature	C	750	744.5	755.5
Sensor voltage	mV	100	97.5	102.5
Sensor Z	kΩ	5	4.5	5.5

Table 1: Probe simulator signal limits

Revision History

Issue	Date	Detail
2	14/8/23	Added battery check