

Technical Note

Model 17*i* Analyzer and Model 42*i* Analyzer Measurement Interface Board

Part Numbers 100536-00 and 100536-01

Bulletin #102111MIB2

Rev 10/21/11

Introduction

The Model 17*i* Analyzer and Model 42*i* Analyzer Measurement Interface Board (P/N 100536-00) has recently been redesigned for use in those instruments where the power is switched on and off to regulate the Photomultiplier temperature. These models include the 17*i*, 42*i*, 42*i*-LS, 42*i*-HL and 42*i*-D and instruments.

Reason for change

The Thermoelectric Cooler (TEC) manufacturer has recommended that to ensure operational life expectancy of the cooler, switched voltages should not exceed 80% of full operational voltage. This effectively means reducing the voltage being sent to the TEC to switch it on and off from 15 volts (15V) to approximately 13 volts (13V).

Description of change

Due to two operational requirements, we have introduced a new part number for use in the 17*i*, 42*i*, 42*i*-LS, 42*i*-HL and 42*i*-D instruments. The new part number is 100536-01 (Note: new number is similar but is “-01” vs. “-00”).

For the 42*i*-TL and 42*i*-Y, the power is not switched but rather, applied at full voltage (15V) for 100% duty cycle which will remain in effect for these instruments. These instruments will continue to be shipped with the original Measurement Interface Board (P/N 100536-00).

There is no discernable difference in normal operation of the instruments using the new board but replacement of the board will ensure longer effective life for the TEC.

The chart below can be used as a guide in determining the appropriate part number for the appropriate Measurement Interface Board.

INSTRUMENT MODEL	PART NUMBER
17 <i>i</i>	100536-01
42 <i>i</i>	100536-01
42 <i>i</i> -LS	100536-01
42 <i>i</i> -HL	100536-01
42 <i>i</i> -D	100536-01
42 <i>i</i> -TL	100536-00
42 <i>i</i> -Y	100536-00

If you have any questions or require technical assistance, please contact your local distributor or our Technical Support team via telephone at (508) 520-0430 or by e-mail at AQIservice@thermofisher.com.