

# PMUX-P (segmented)

## Contents of package

- 1 PMUX-P 'high current cell multiplexer'
- 1 Controller card RMUX/P (plug-in card for IM6/6eX)
- 1 cable SUBD44 to SUBD25 (RMUX/P->PMUX)
- 1 IM connector cable set (banana->Lemoso, red/black, blue/green)
- 1 PP connector cable set (banana/banana red/black, banana/Lemoso blue/green)
- 16 sets of cell cables (4 lines each: red/black, blue/green)
- 1 RMUX cable set (Lemoso/Lemoso, only use if RMUX is used without PMUX)

## CAUTION

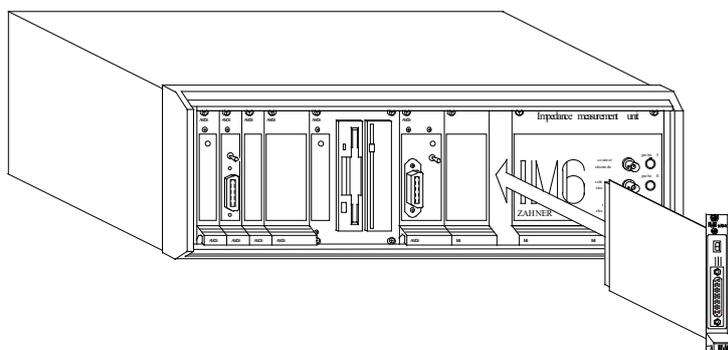
The PMUX-P is configured for sequentially measuring through up to 16 segments of a segmented fuel cell. For that application a PP-series potentiostat or an EL-series electronic load is used for loading all segments except the one which is measured. The measurement is done by the internal IM potentiostat. The software carries out sequential measurements through all segments of the fuel cell. With one PMUX-P these are up to 16 segments. Up to 3 PMUX-P modules can be stacked for a total of up to 48 segments. Both, the PP and the IM POT have to be connected to the PMUX-P.



**If you intend to use the RMUX without the PMUX-P the RMUX hardware setting must be changed. Please contact ZAHNER for more information. The RMUX cable set is used only for that application.**

## Hardware installation

Switch off the IM6 and remove the dummy front panels named 'IM6 extension' **RIGHT** to the 'AHSI-2' card. Push in the **RMUX** card in one of the empty extension slots and fix the screws. If the **EPC40** for connecting the PP or EL is not installed, do it now in the same way.



## Connection of modules

1. Connect the PMUX-P to the RMUX/P using the multi-pin Sub-D/Sub-D cable. Connect the 44-pin (3-row) Sub-D connector to the RMUX/P and the 25-pin Sub-D connector to the CTRL terminal of the PMUX-P.
2. Connect the PMUX to the IM6/6eX using the two banana/Lemosa cables red/black and blue/green. Connect the banana plugs (red/black and blue/green) to the outlets **RE<sub>IM</sub>** (green), **TES<sub>IM</sub>** (blue), **CE<sub>IM</sub>** (red), and **TE<sub>IM</sub>** (black) of the PMUX. Connect the Lemosa plugs to the **Probe-I** and **Probe-E** outlets of the IM6/6eX.
3. Connect the PMUX to the PP using the thick banana/banana cable red/black and the banana/Lemosa cable blue/green. Connect the blue and green banana plugs of the banana/Lemosa cable to the **TES<sub>PP</sub>** and **RE<sub>PP</sub>** outlets of the PMUX and the Lemosa plug to the **Sense** outlet of the PP device. Connect the small banana plugs of the red/black to the outlets **CE<sub>PP</sub>** (red), **TE<sub>PP</sub>** (black) of the PMUX and the other end to the **Power** outlets of the PP.
4. Connect the channels you need (1 – 16) with all four lines each (RE, TES, CE, and TE) to the according electrodes or points of your cells. Channel 1 to cell 1, channel 2 to cell 2, etc.

RE = reference electrode (green)  
TES = test electrode sense (blue)  
CE = counter electrode (red)  
TE = test electrode (working electrode) (black)