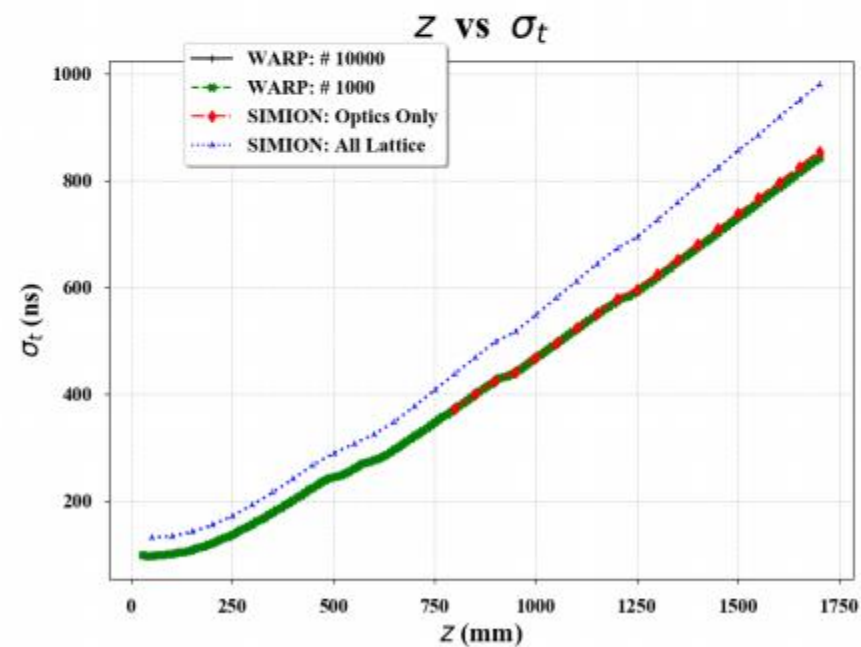
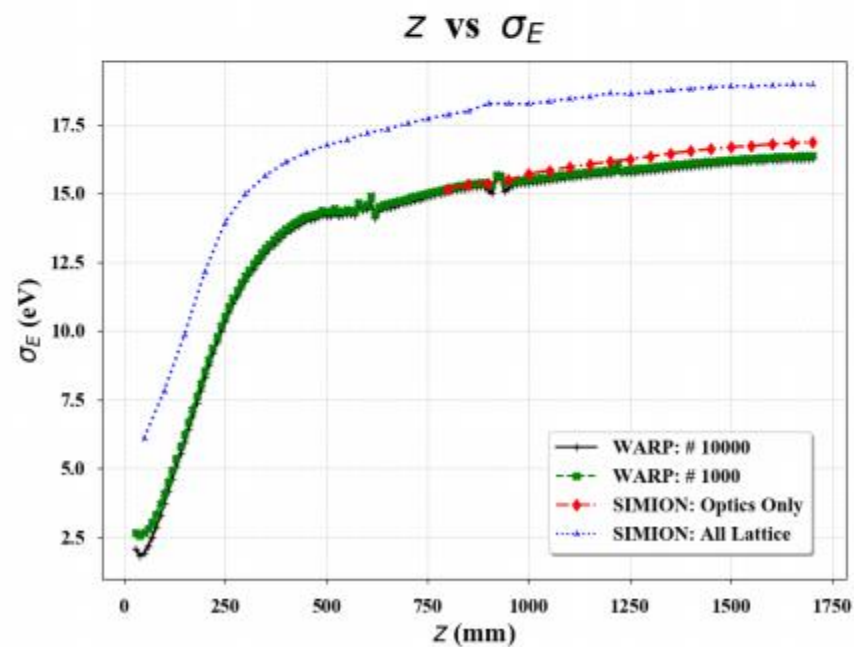
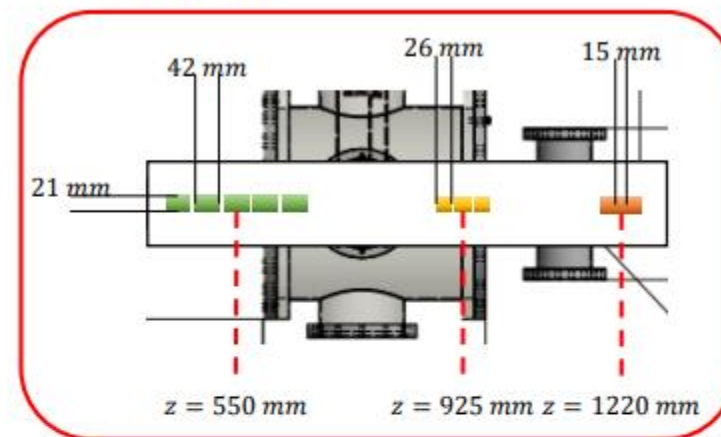


GBAR Trap Meeting

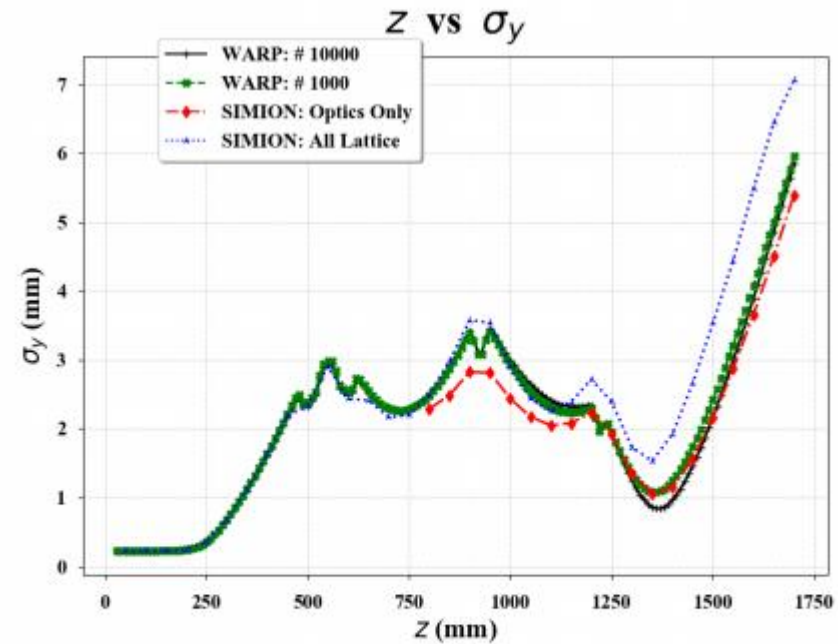
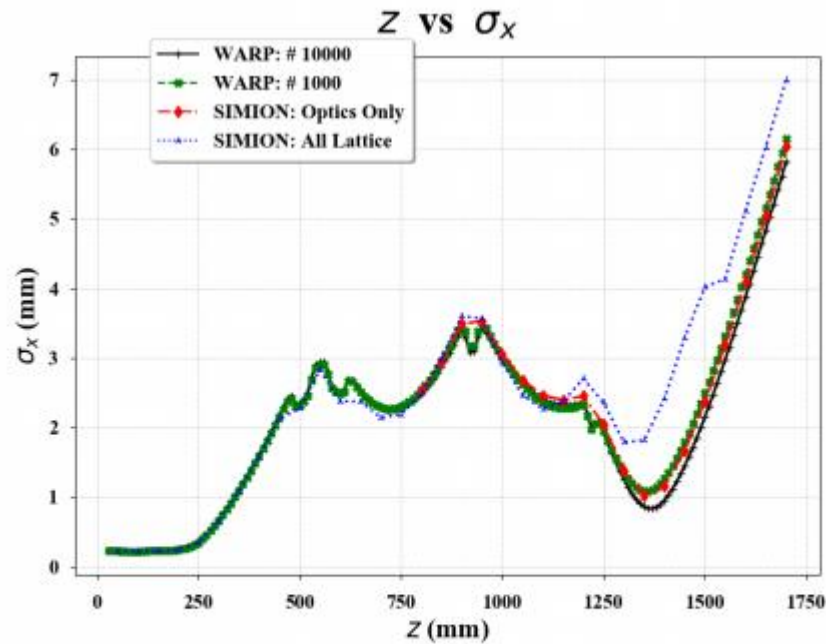
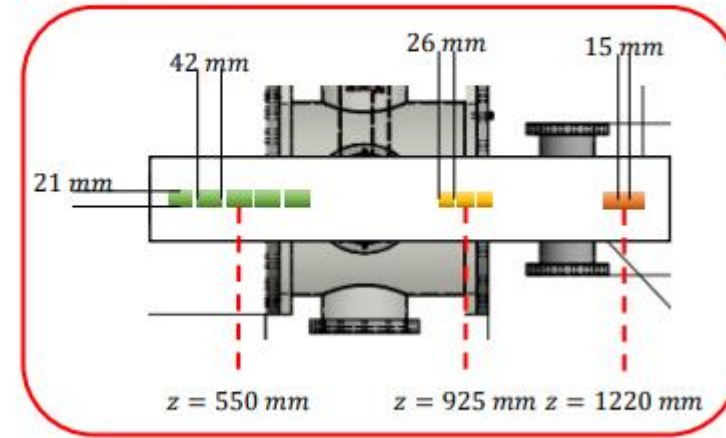
Seoul National University

01.Apr.2019

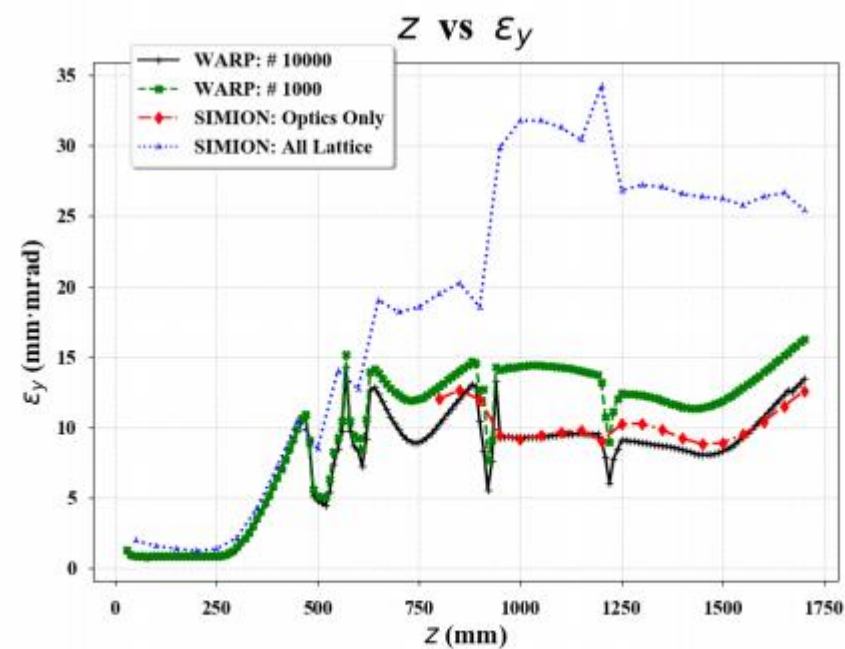
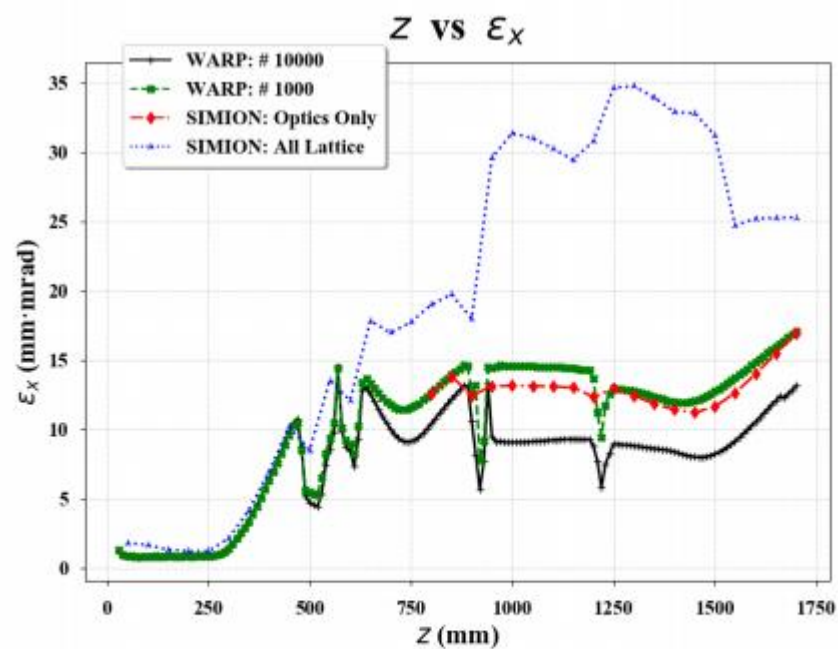
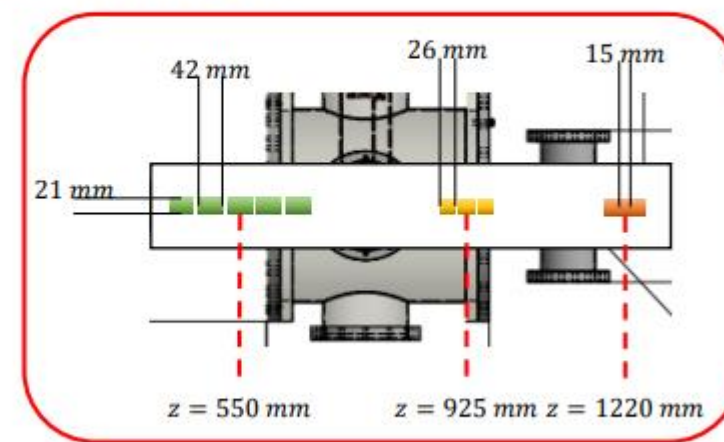
Comparison between WARP & SIMION



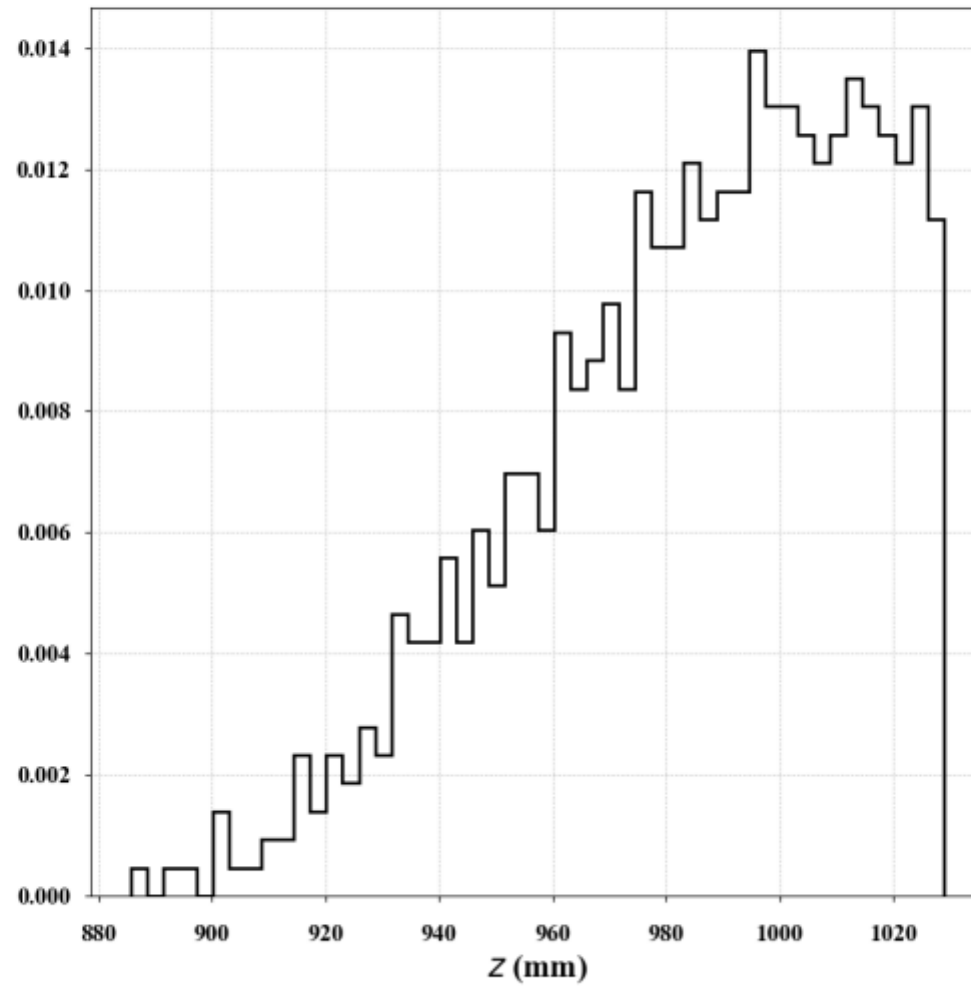
Comparison between WARP & SIMION



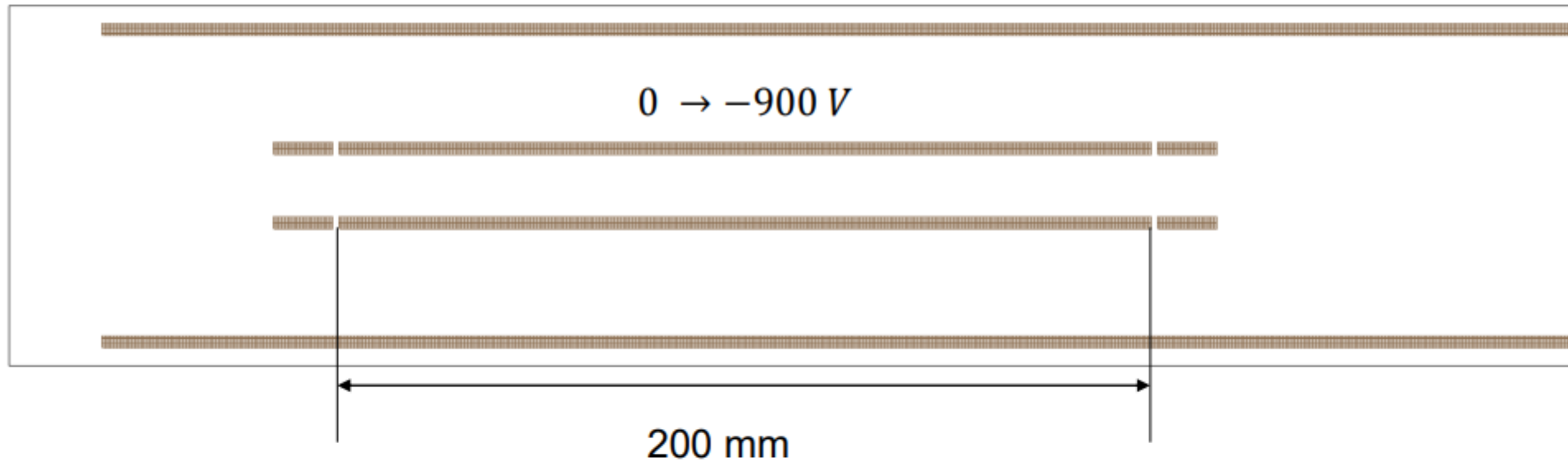
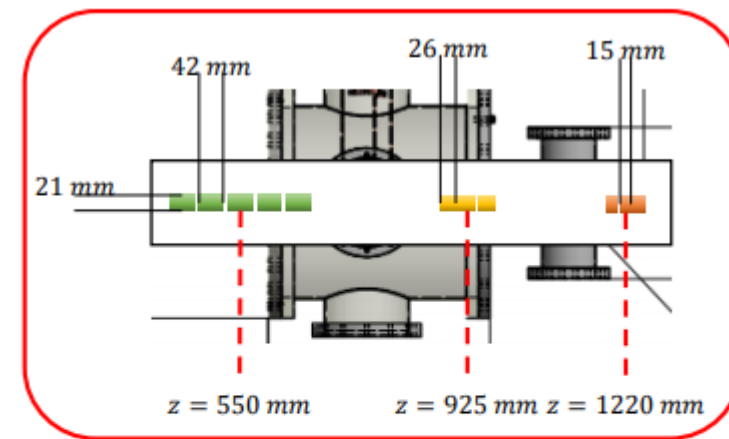
Comparison between WARP & SIMION



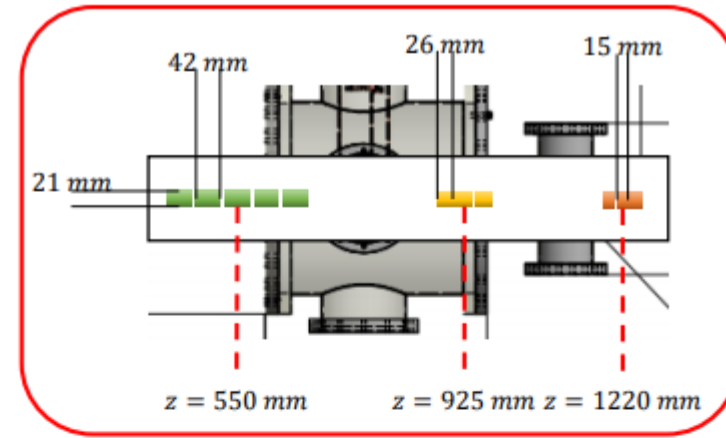
Beam Length in Space



Reacceleration Lattice



Bunch Compression Lattice



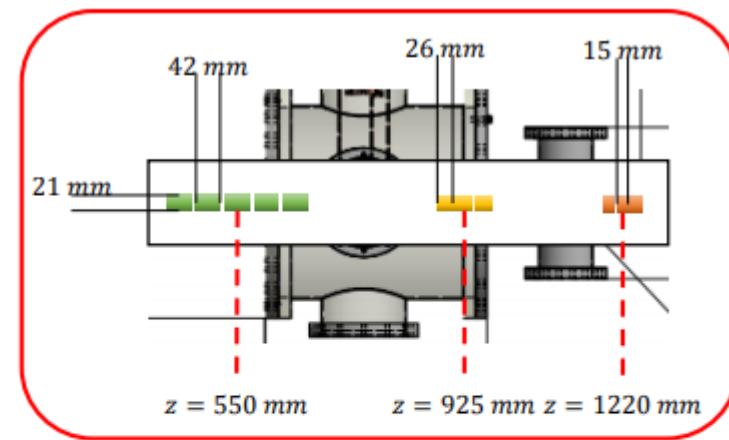
$$V = 140 \sin(\omega t + \phi)$$

$Z = 800 \text{ mm}$

$Z = 910 \text{ mm}$

$Z = 1000 \text{ mm}$

Bunch Compression Lattice



$$V = 300 \sin(\omega t + \phi)$$

$Z = 800 \text{ mm}$

$Z = 910 \text{ mm}$

$Z = 1000 \text{ mm}$

Question

- I need to evaluate the size of the dewar needed for the magnet : What is the volume of He liquid needed to cool down the magnet ?

What is the volume of liquid to fill the magnet and do you know the daily consumption ?

-Total 500L required (and year monthly few 10L ?)

Volume of liquid helium required for initial installation (includes magnet cool-down from 77K to 4.2K and volume required to completely fill helium vessel after magnet energization). : **500 L**
Cooling + Filling up

Liquid helium cryogen details :-

Siphon leg diameter : **12.7 mm**

Recommended minimum level of liquid during normal operation :-

•reading on probe : **70 mm**

•length of probe : **470 mm**

Recommended refill volume during normal operation (nominal) : **96 L**

Normal hold time : Greater than **90** days

Maximum liquid evaporation rate : **45 ml/h (expected)** Consumption
1.08L/day

Required(maintain)
-> 96L/3month

NDT1470

4 Ch Reversible 8 kV/3 mA (8 W) NIM/Desktop HV Power Supply Module (USB/Ethernet/T.screen)

Request a quote

Manual

Downloads

Features

- 4 channels in 2U NIM module
- 220 V/110 V AC plug for desktop operation
- 8 kV / 3mA output ranges
- Max output power:
 - 9 W (<3 kV output)
 - 8 W (>3 kV output)
- Channels with individually selectable positive or negative polarity
- SHV coaxial output connectors
- Common floating return
- Max Ripple smaller than < 30mVpp

안녕하세요. 박사님

CAEN의 한국 대리점인 (주)피에스케이테크놀로지 강태욱 입니다.
CAEN의 제품에 관심을 가져 주신 점 대단히 감사합니다.
ND1470의 가격은 EUR4,610이며, 납기는 6~12주 사이 입니다.

오전에 연락 드리겠습니다.

감사합니다.
강태욱 드림

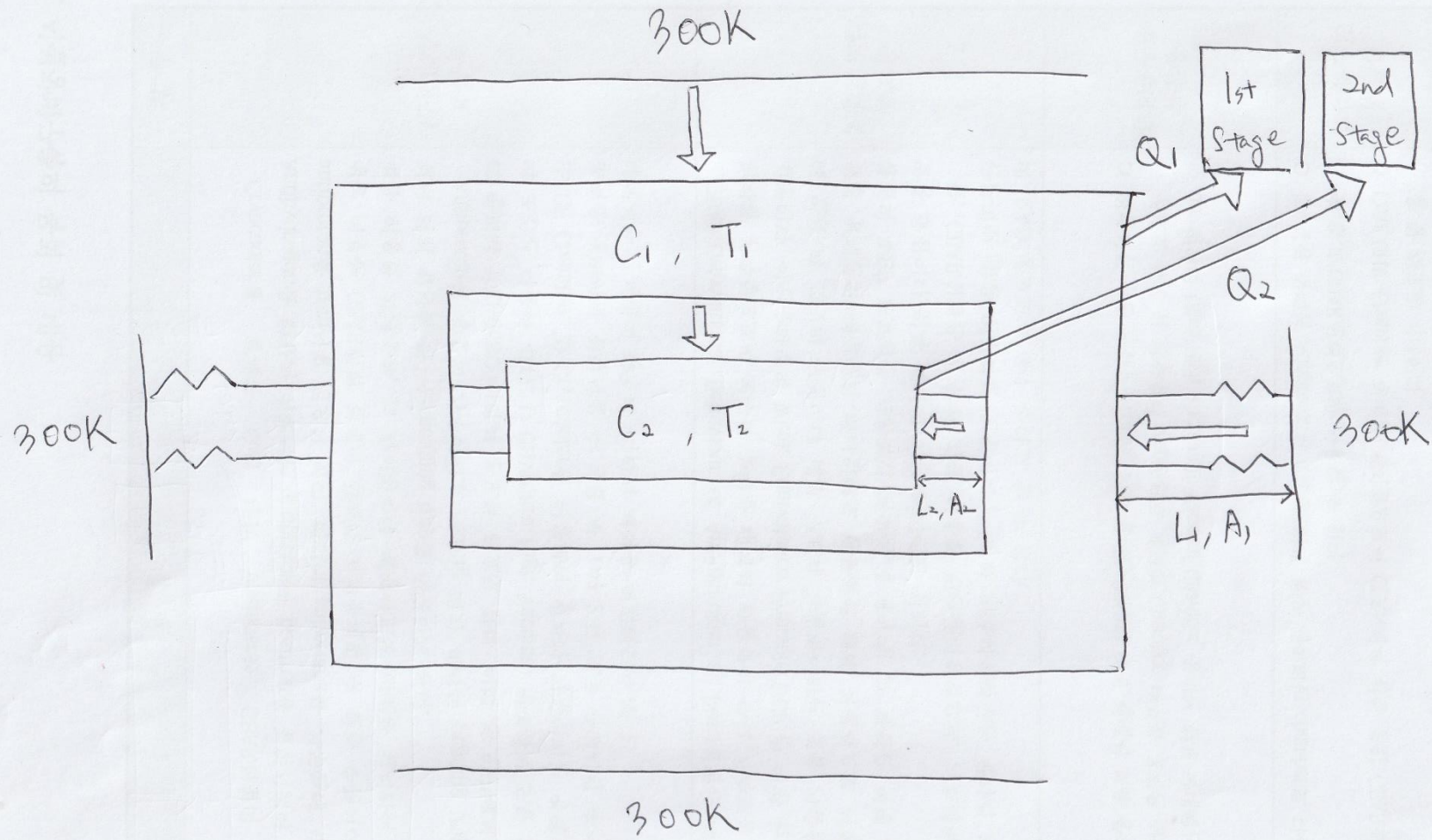
유럽연합 EUR

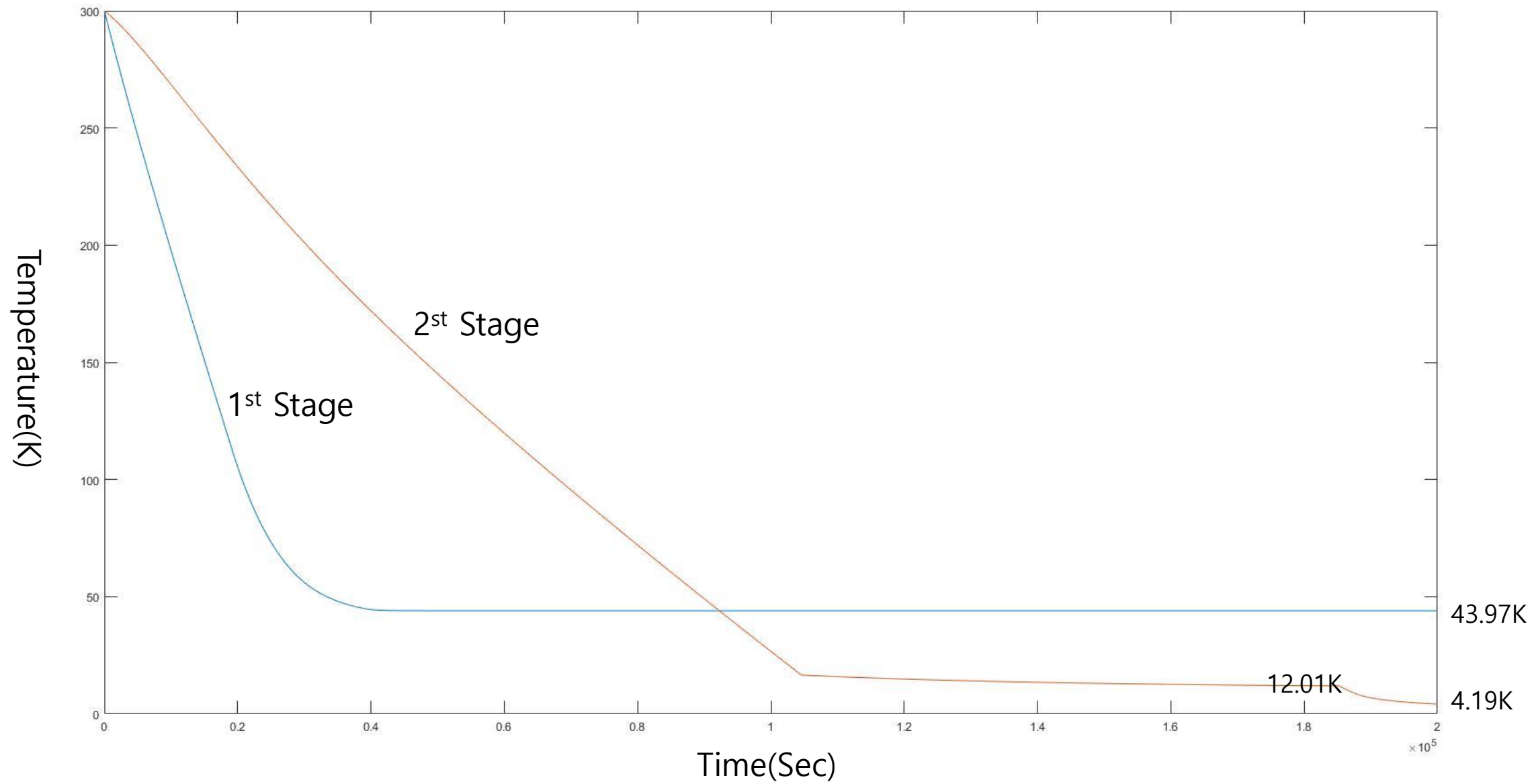
4610
4,610 유로

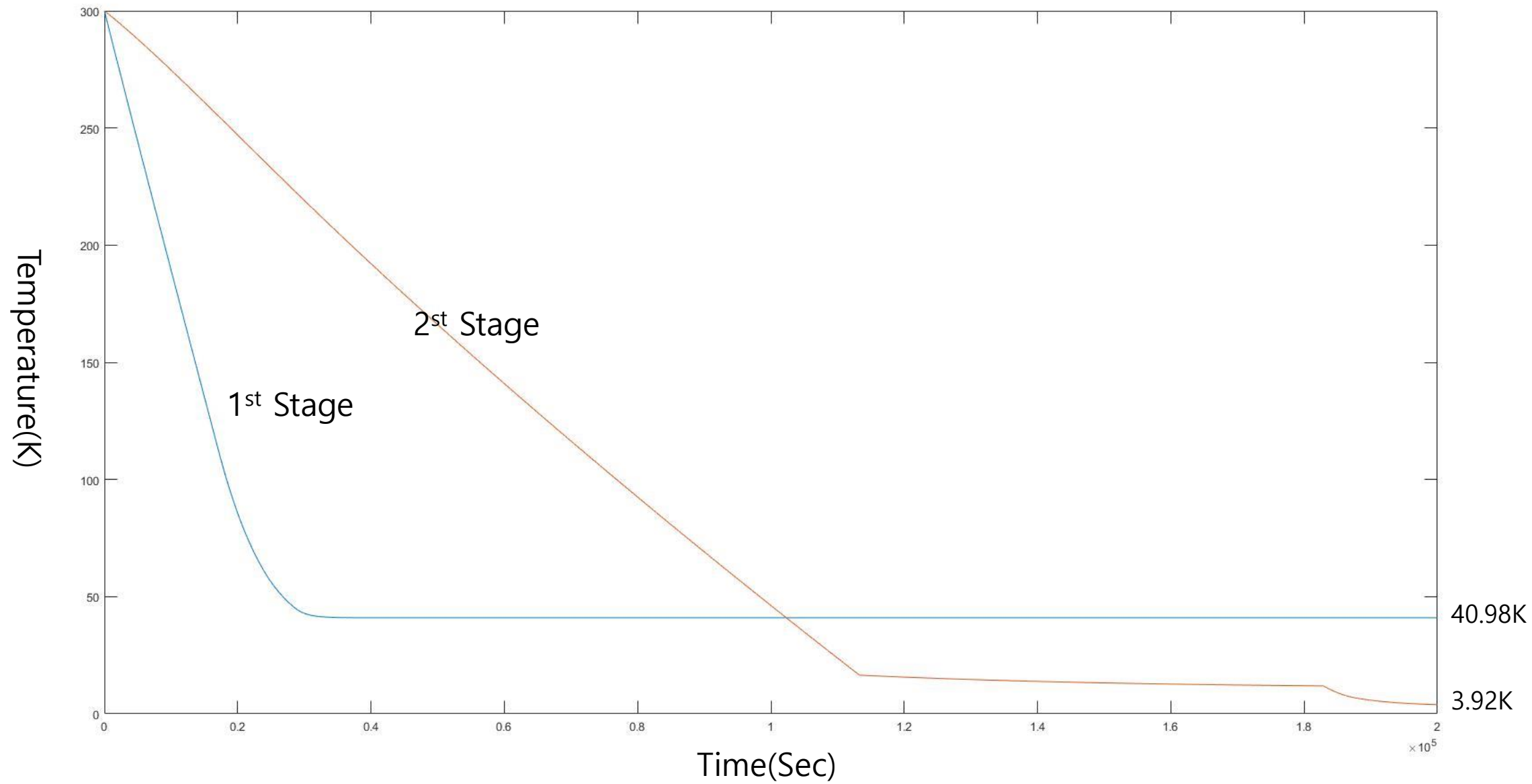
대한민국 KRW

5,877,242.90
587만 7,242.90 원

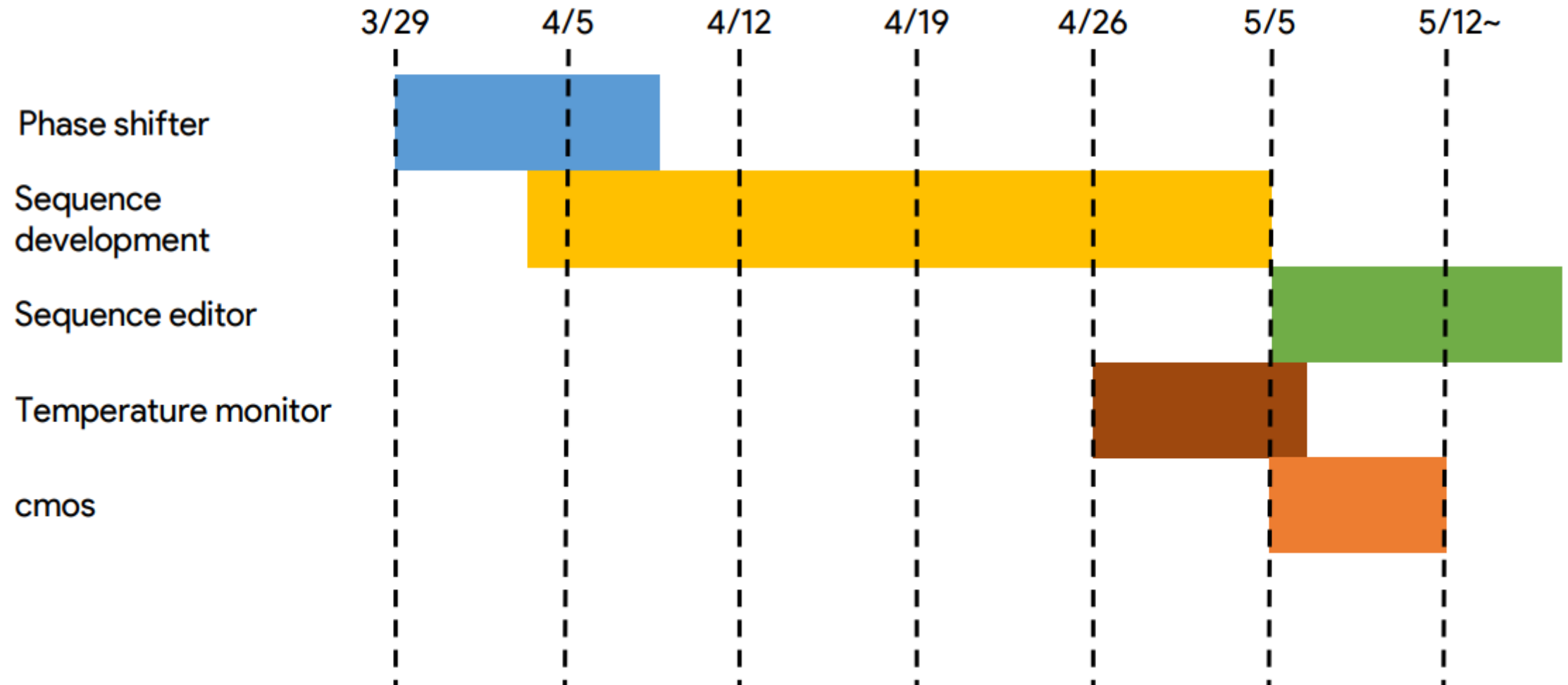
SHR 40 60r_SHV 4 channel Desk-Top HV PS SHR STANDARD Vnom, Inom and Polarity switchable electronically Mode 1: Vnom= 6 kV; Inom= 2 mA Mode 2: Vnom= 4 kV; Inom= 3 mA Mode 3: Vnom= 2 kV; Inom= 4 mA Front panel control, 4.3" TFT, capacitive touch display USB and Ethernet interfaces Resolution of voltage setting/measurement: 12 mV Resolution of current setting/measurement: 8 nA Ripple & noise: < 10 mV (f > 10 Hz) HV output: SHV connector HV cable with SHV connector one-sided, 5m / 4EA	14,000,000	1	14,000,000
THQ 2-channel basic unit DPS with EPU AC/DC converter (100 up to 240 V-AC) for two HV modules DPS with EPU series (without DPSmini) polarity switchable with front panel switch at Vout= 0 voltage and current control with potentiometer, analog I/O (0 to 5V) or USB interface voltage and current display (LCD / 4 digit) HV-output with SHV on the rear DPr 60 155 24 5_SHV-THQ (Vout = 0 to 6 kV / Ioutnom = 1,5 mA) HV cable with SHV connector one-sided, 5m / 2EA	6,500,000	1	6,500,000







Schedule for Control



Thank You!