



JAGIELLONIAN UNIVERSITY
IN KRAKOW



SOLARIS
NATIONAL SYNCHROTRON
RADIATION CENTRE



JAGIELLONIAN UNIVERSITY
IN KRAKOW



SOLARIS
NATIONAL SYNCHROTRON
RADIATION CENTRE

SOLAR pumping unit next SOLARIS Web application

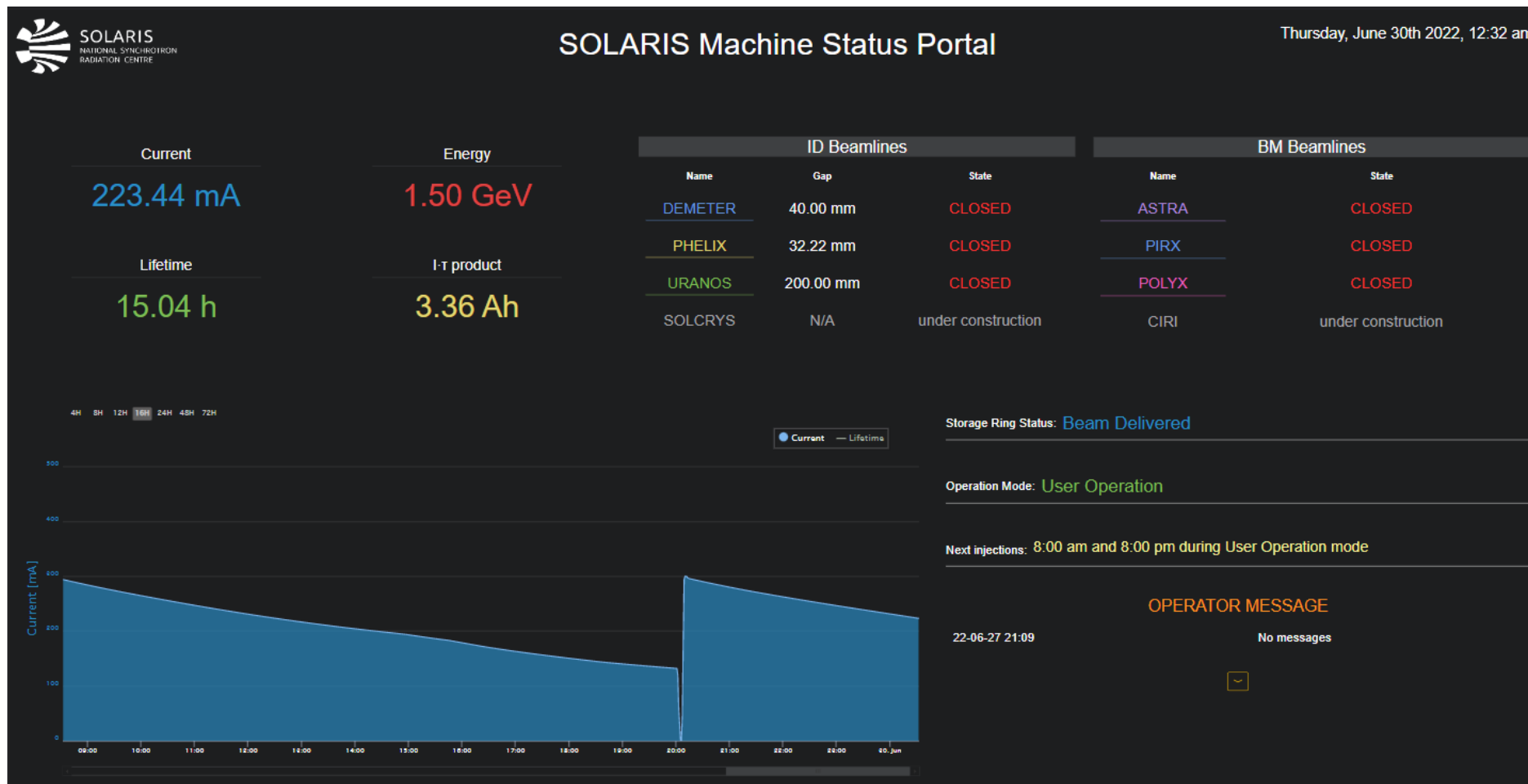
36th Tango Community meeting MAX IV Lund, 29 - 30.06.2022

Adrianna Pytel, Wojciech Wantuch

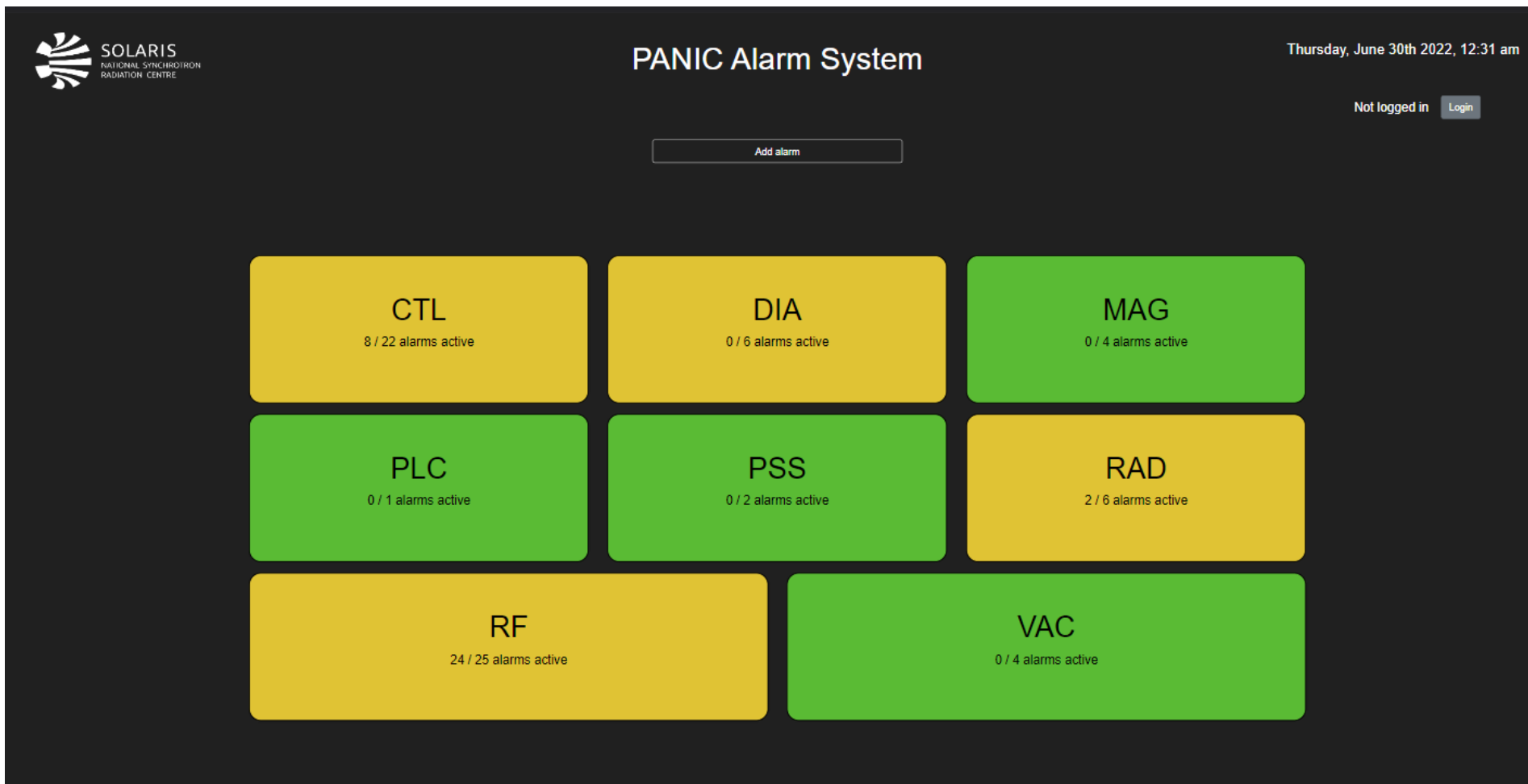
National Synchrotron Radiation Center SOLARIS



SOLARIS web applications




SOLARIS web applications



The screenshot displays the 'PANIC Alarm System' web application. The interface has a dark background. At the top left is the SOLARIS logo. The title 'PANIC Alarm System' is centered at the top. On the top right, it shows the date and time 'Thursday, June 30th 2022, 12:31 am' and a login status 'Not logged in' with a 'Login' button. Below the title is an 'Add alarm' button. The main area contains seven colored boxes representing different alarm systems, each with its name and the number of active alarms out of a total:

System	Active Alarms / Total Alarms
CTL	8 / 22
DIA	0 / 6
MAG	0 / 4
PLC	0 / 1
PSS	0 / 2
RAD	2 / 6
RF	24 / 25
VAC	0 / 4

SOLARIS web applications

 SOLARIS
NATIONAL SYNCHROTRON
RADIATION CENTRE

Interlock GUI

Thursday, June 30th 2022, 12:34 am

Not logged in [Login](#)

[Locations](#) [Categories](#)

Beam line
0 / 4 Interlocks active

Frontend bending magnet
0 / 53 Interlocks active

Frontend insertion devices
2 / 71 Interlocks active

Klystron Tunnel
4 / 77 Interlocks active

Linac Tunnel
0 / 57 Interlocks active

Room
0 / 8 Interlocks active

Storage Ring
0 / 561 Interlocks active

Storage Ring Gallery
0 / 186 Interlocks active

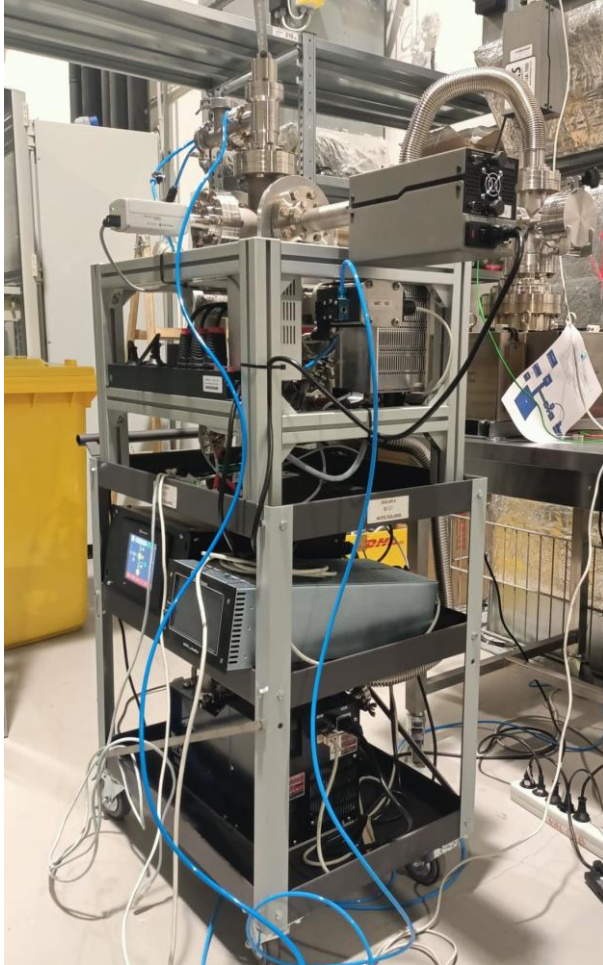
Unknown
1 / 2 Interlocks active

Resets

Global Reset

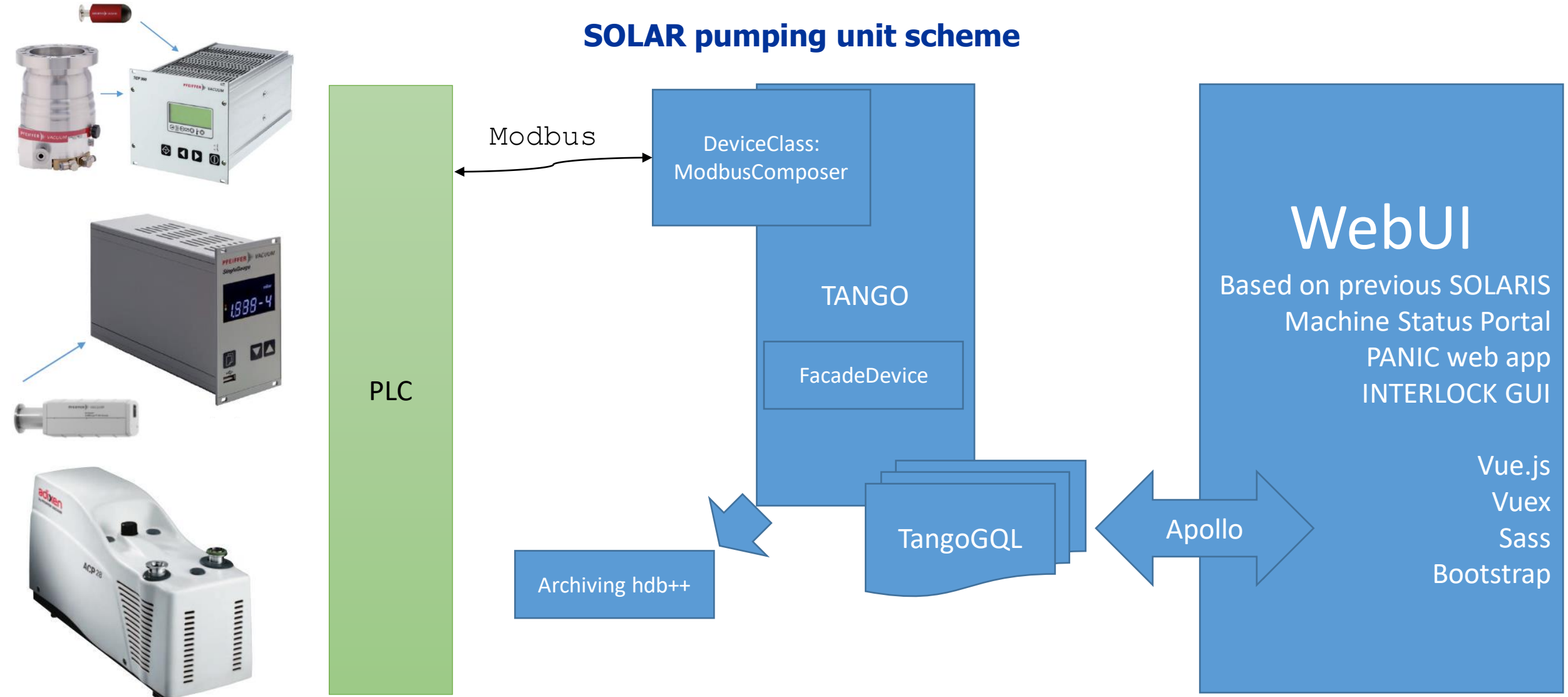
04FEBM	04FEID
05FEID	06FEID
10FEBM	12 01 VAC RESET
IRF RESET ALL	IVAC RESET
K00CAB02 CTL RPS	MAG RPS ALL
SGA MAG RESET	SGDCAB12 CTL RPS
SHG1 WATRF RESET	SHG1 WATRF SGDCAB11 RF ARCDR1 RESET
SHG2 WATRF SGDCAB11 RF ARCDR2 RESET	TLCAB03 CTL RPS

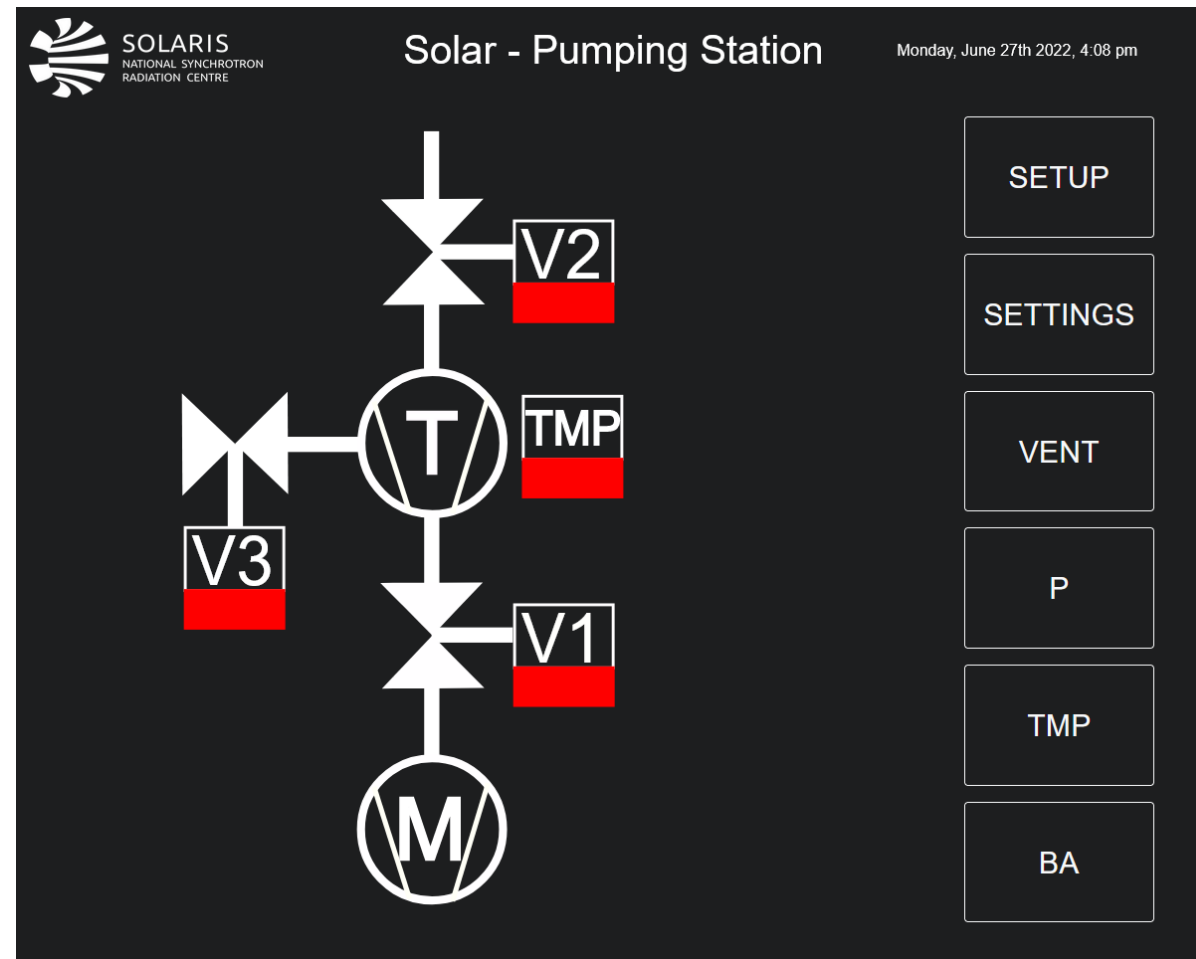
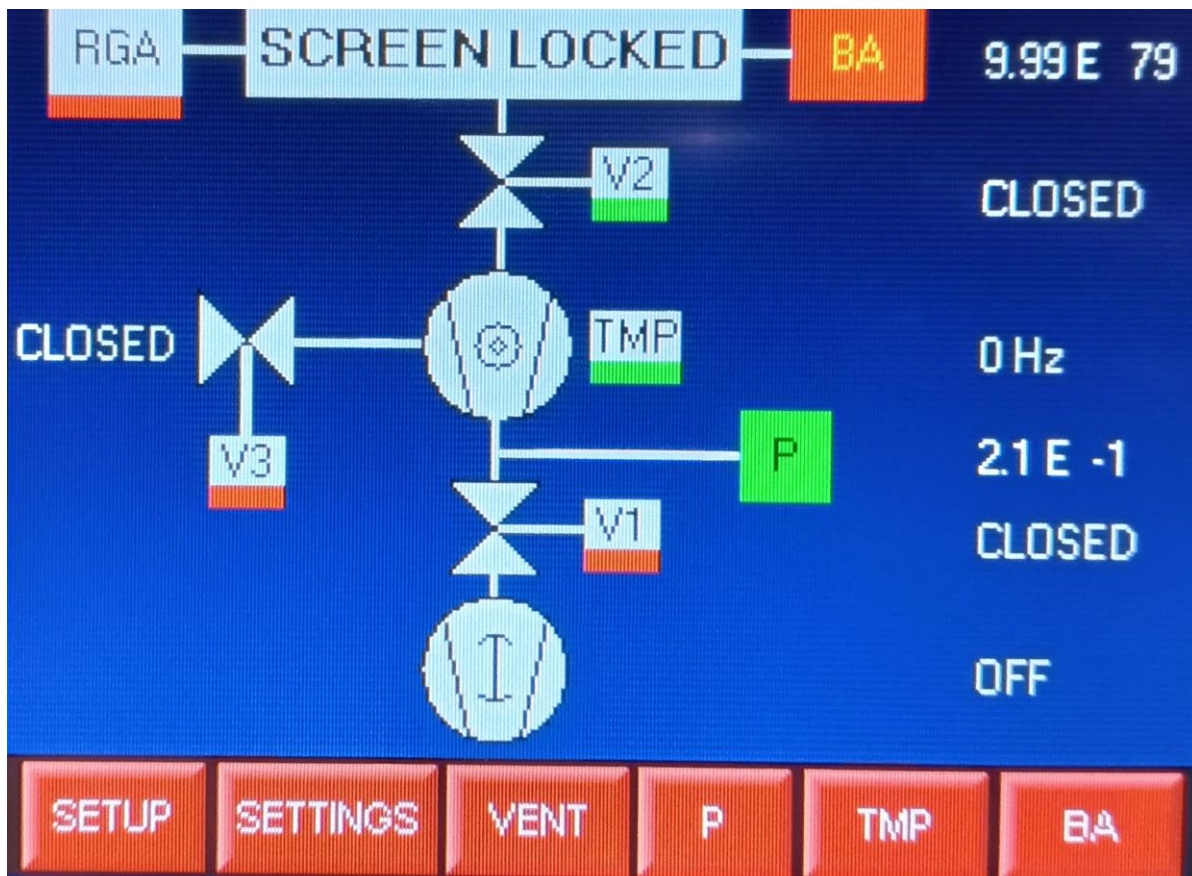
Some facts about SOLAR



- Construction provides easy access to all components
- High availability of components in stores
- Modularity
- Kashiwama NeoDry 15E pump instead of Pfeiffer ACF 15
- Four are completed and two are under construction

SOLAR pumping unit scheme







Define Name - to set PLC name restart PLC required

Name/PLC name

TCP/IP Configuration - restart PLC required

IP address	<input type="text" value="192"/>	<input type="text" value="168"/>	<input type="text" value="105"/>	<input type="text" value="35"/>
Mask	<input type="text" value="255"/>	<input type="text" value="255"/>	<input type="text" value="255"/>	<input type="text" value="0"/>
Gateway	<input type="text" value="192"/>	<input type="text" value="168"/>	<input type="text" value="105"/>	<input type="text" value="0"/>

SOLARIS
NATIONAL SYNCHROTRON
RADIATION CENTRE

Solar - Pumping Station

Monday, June 27th 2022, 3:50 pm

SETUP

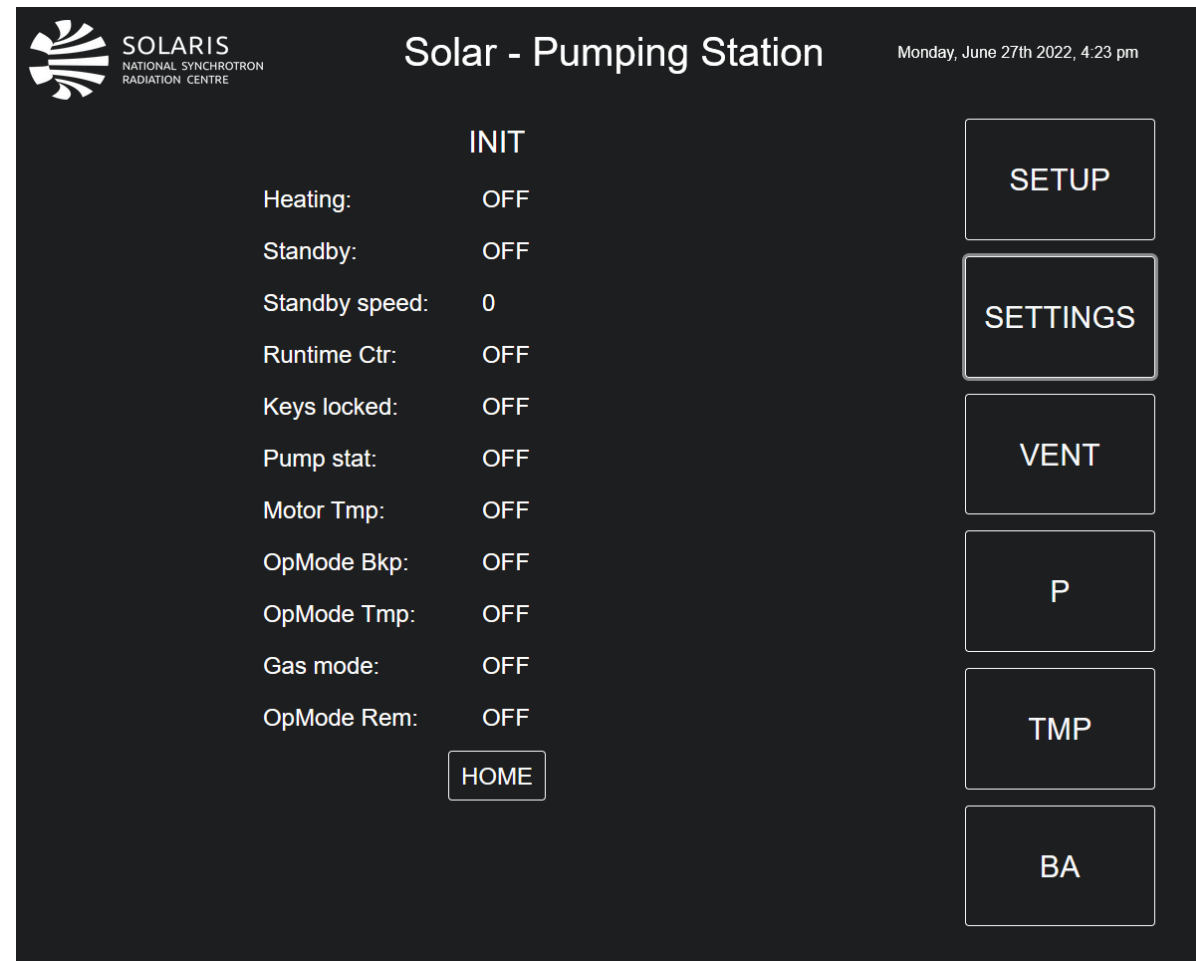
PLC name: SOALR3

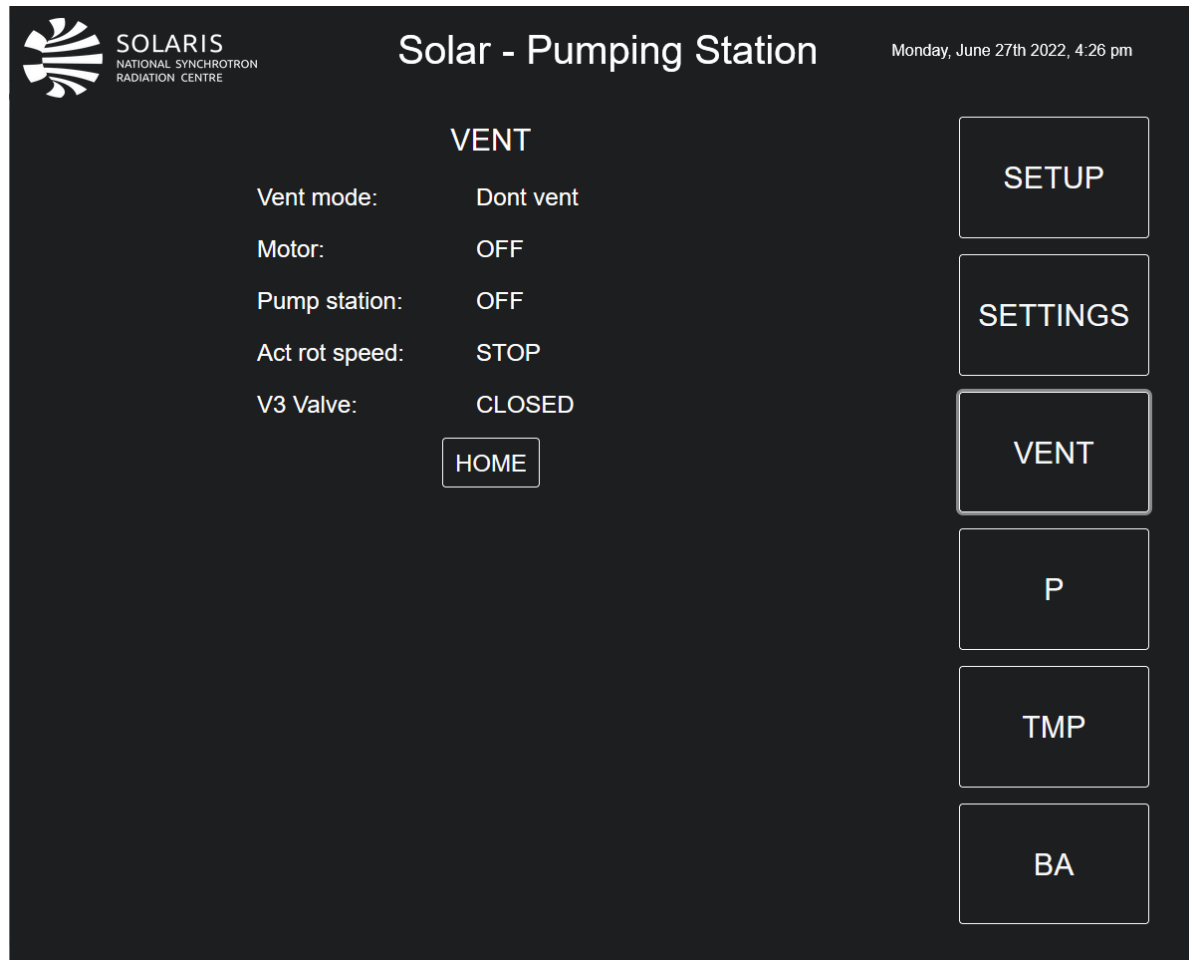
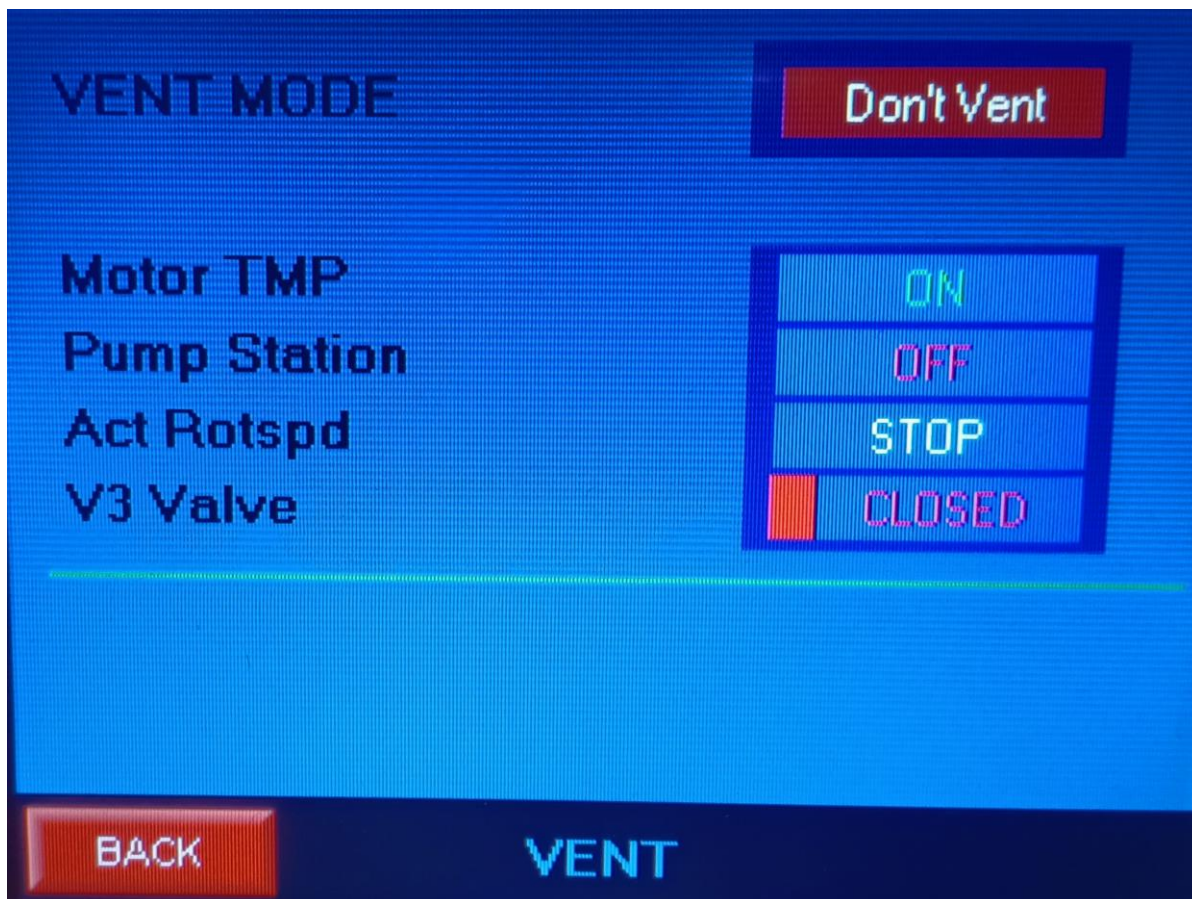
IP address: 192.168.105.35

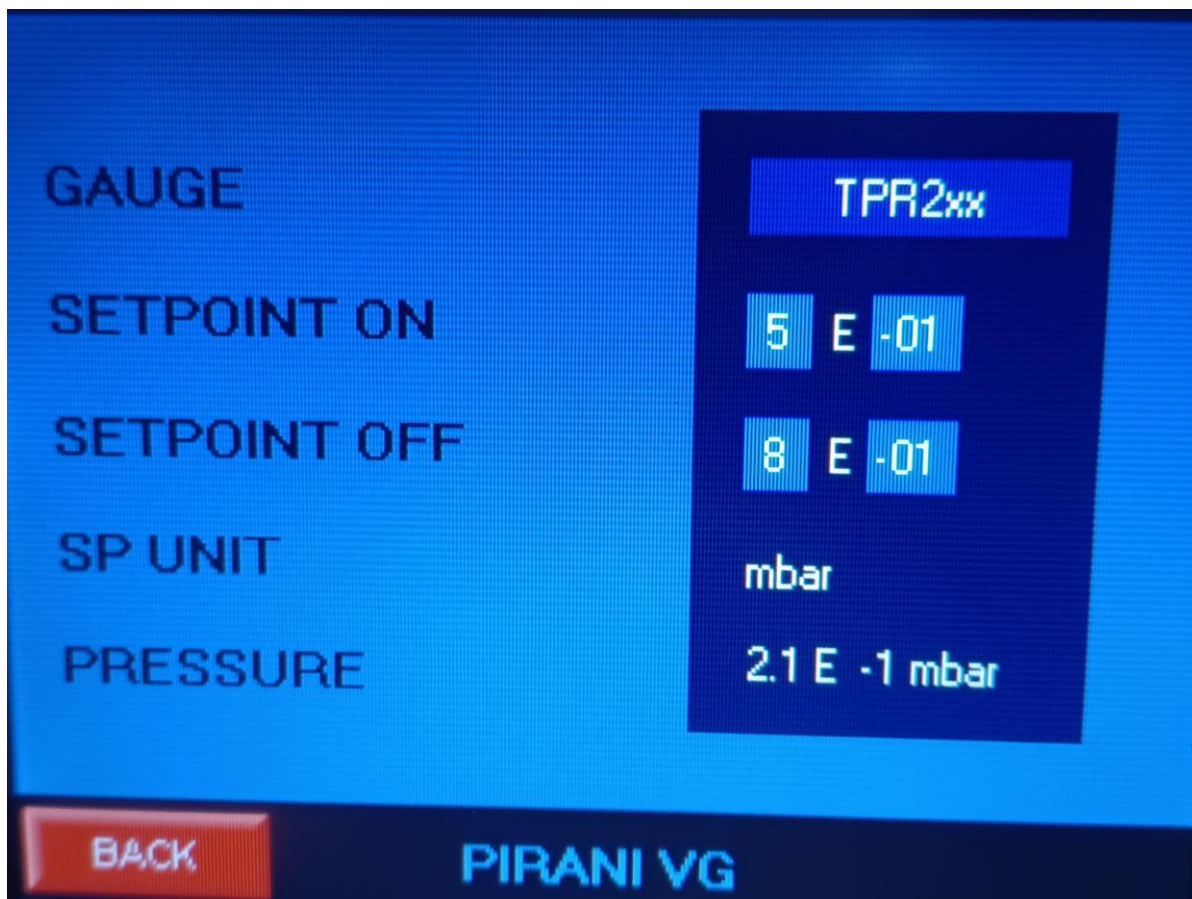
Mask: 255.255.255.0

Gateway: 192.168.105.0

TCP/IP Configuration - PLC restart required







Solar - Pumping Station

Monday, June 27th 2022, 3:51 pm

PIRANI VG

Gauge: TPR2xx

Setpoint ON: 1e-01

Setpoint Off: 5e-01

SP unit: mbar

Pressure: 6.4e-01

HOME

SETUP

SETTINGS

VENT

P

TMP

BA



TYPE	
ROTATION SPEED	1500 Hz
ROTATION ACTUAL	0 Hz
SUPPLY VOLTAGE	72.00 V
MOTOR CURRENT	0.00 A
POWER	0.1 W
TMP RUNTIME	8 min
TMP OP HRD	1450 h
DRV OP HRS	1740 h
ERROR CODE	000000
<div>BACK</div> <div>Turbomolecular Pump</div>	



Solar - Pumping Station

Monday, June 27th 2022, 3:51 pm

TURBOMOLECULAR PUMP

Rotation speed: 1500Hz
Rotation actual: 0Hz
Supply voltage: 72V
Motor current: 0A
Power: 0W
TMP runtime: 8min
TMP OP HRD: 0h
DRV OP HRS: 0h
Error code:

HOME

SETUP

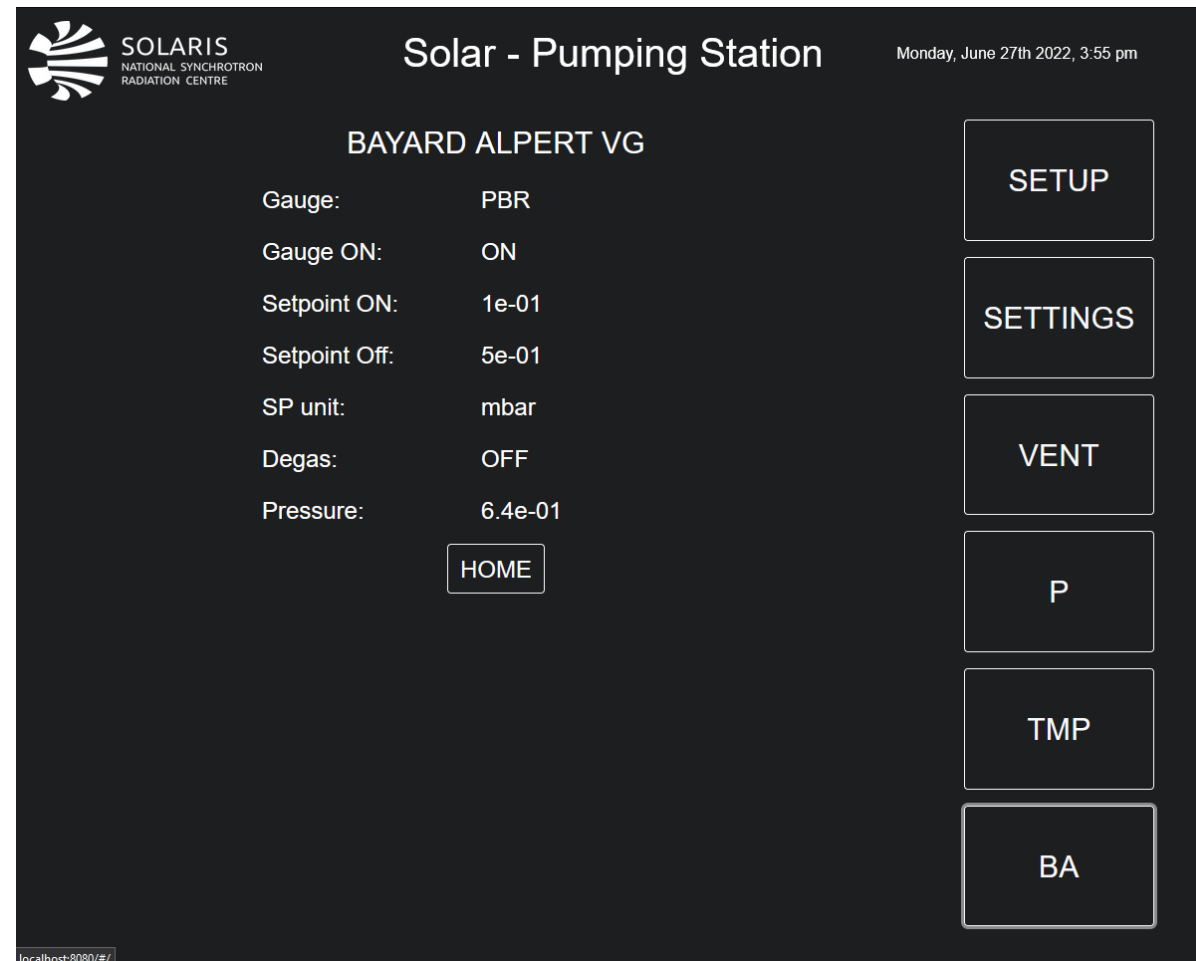
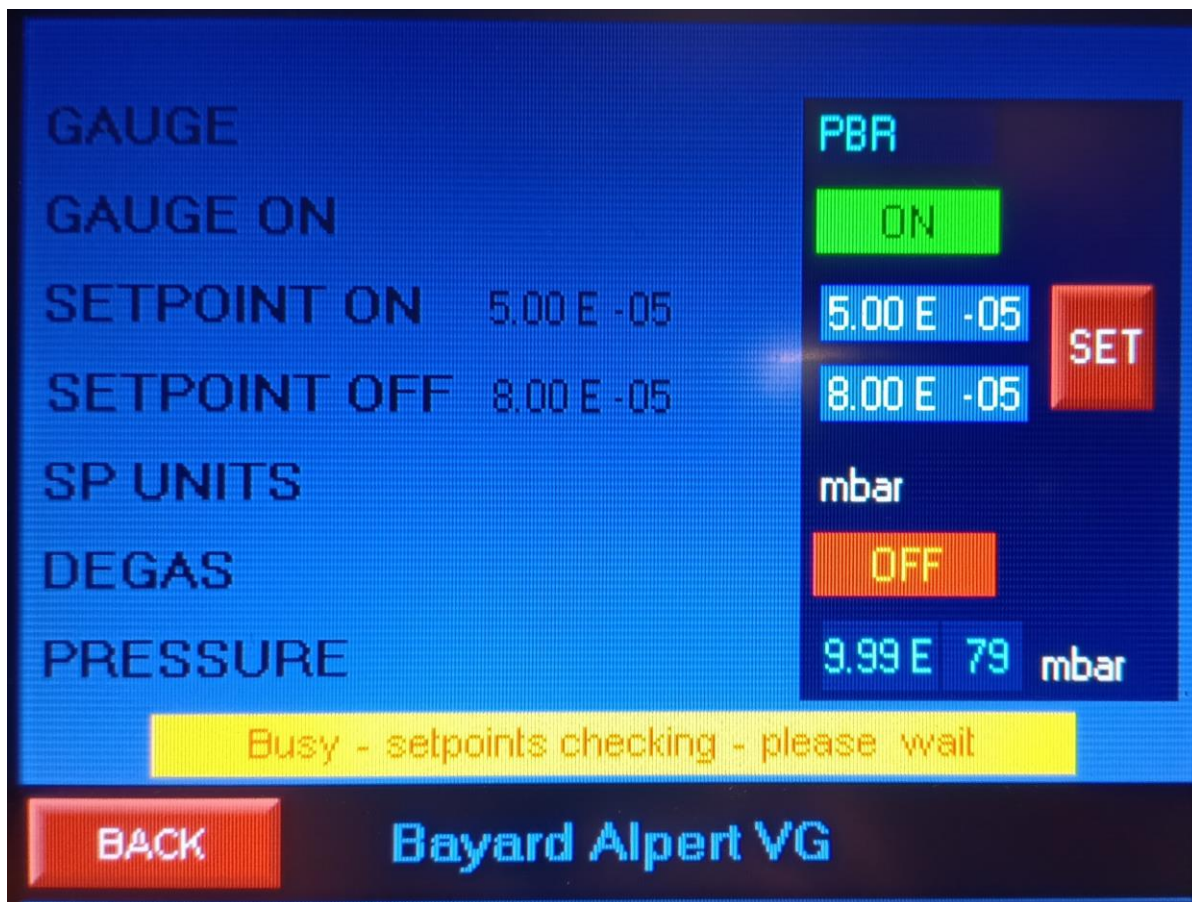
SETTINGS

VENT

P

TMP

BA





T_hANK YOU

If you have any questions, e-mail us

adrianna.pytel@uj.edu.pl
wojciech.wantuch@uj.edu.pl