SUN STATE SYSTEMS, INC.
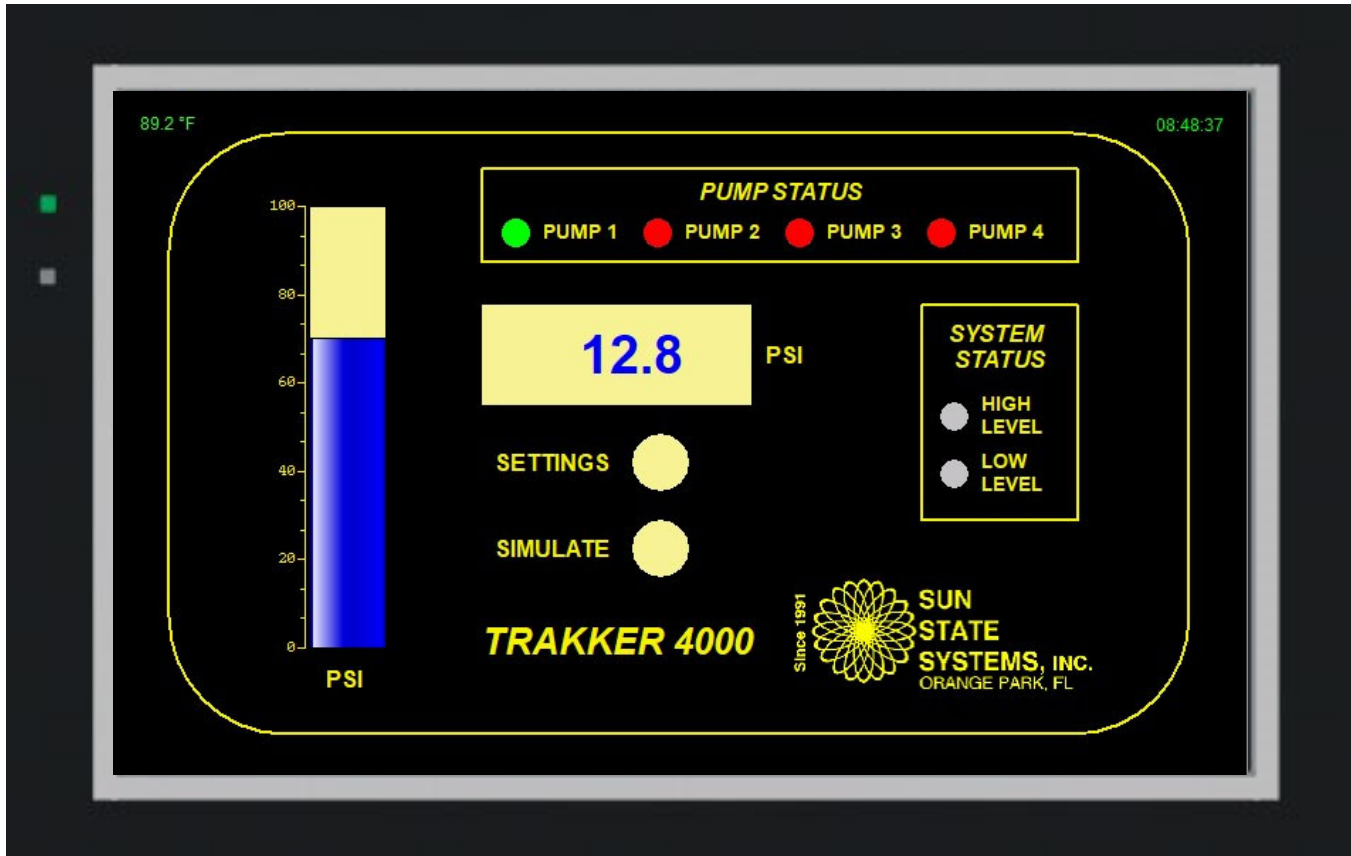### CONTROL SYSTEM SOLUTIONS

TRAKKER 4000
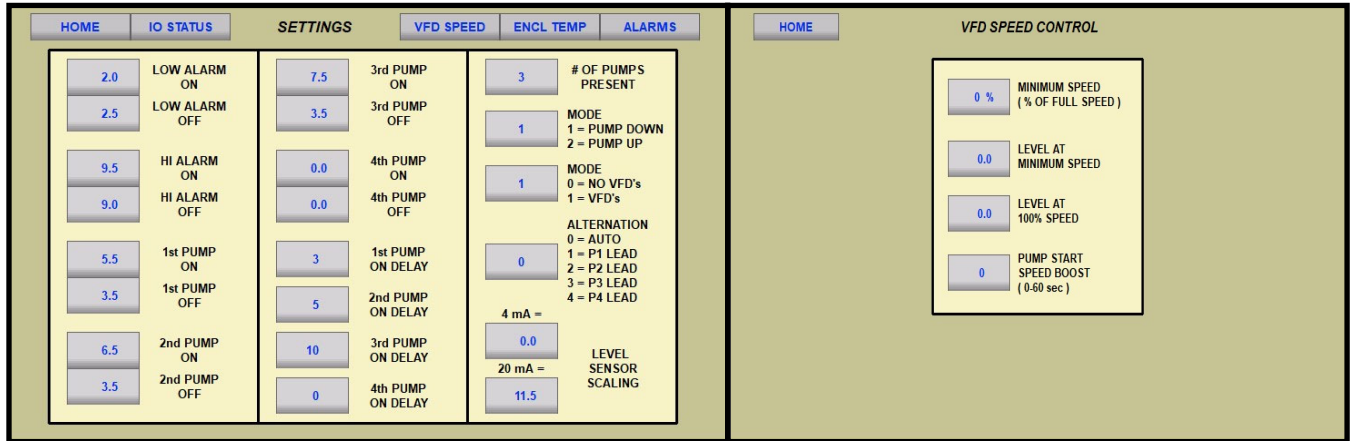## *FIXED OR VARIABLE SPEED PUMP CONTROLLER*

The *TRAKKER 4000* series controllers take a major leap in intelligent pump control. Built upon our *TRAKKER 3000* series platform, *TRAKKER 4000* controllers feature an enhanced user interface, greater functionality, and higher performance.

♦ **INTELLIGENT PUMP CONTROL**
   Intelligently control up to four pumps with features including automatic or manual alternation, alarm status notification and history, enclosure interior temperature monitoring (included with VFD and RVSS panels), variable speed control on VFD panels.

♦ **EASY SETUP**
   Parameter settings are done by a touch of a button, entering vale from a popup keypad and press enter. Calibration of the analog 4-20mA input is achieved in the same fashion and there is no need for a signal generator.

♦ **LEVEL SIMULATION**
   Station level can be simulated from the user interface with visual indication. Simulation auto resets after thirty seconds of inactivity.

♦ **SCADA READY**
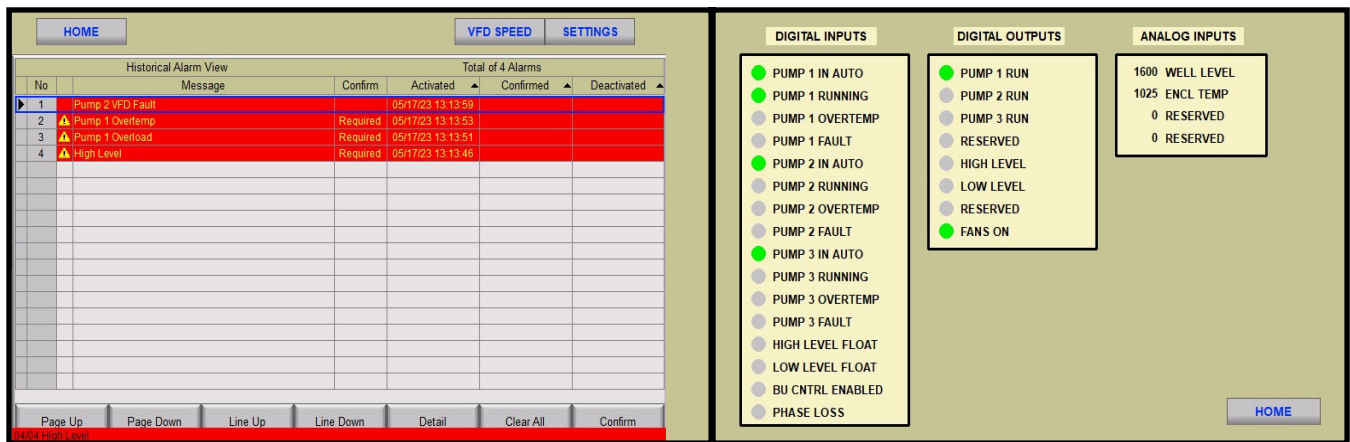   Controller features Modbus RTU, Modbus TCP/IP and Ethernet IP protocols built in.

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STANDARD FEATURES

- Intuitive user interface screens

System Parameter Setup (SETTINGS screen)

Navigation: HOME | IO STATUS | *SETTINGS* | VFD SPEED | ENCL TEMP | ALARMS

Value	Parameter
2.0	LOW ALARM ON
2.5	LOW ALARM OFF
9.5	HI ALARM ON
9.0	HI ALARM OFF
5.5	1st PUMP ON
3.5	1st PUMP OFF
6.5	2nd PUMP ON
3.5	2nd PUMP OFF
7.5	3rd PUMP ON
3.5	3rd PUMP OFF
0.0	4th PUMP ON
0.0	4th PUMP OFF
3	1st PUMP ON DELAY
5	2nd PUMP ON DELAY
10	3rd PUMP ON DELAY
0	4th PUMP ON DELAY
3	# OF PUMPS PRESENT
1	MODE 1 = PUMP DOWN 2 = PUMP UP
1	MODE 0 = NO VFD's 1 = VFD's
0	ALTERNATION 0 = AUTO 1 = P1 LEAD 2 = P2 LEAD 3 = P3 LEAD 4 = P4 LEAD
4 mA = 0.0	LEVEL SENSOR SCALING
20 mA = 11.5	LEVEL SENSOR SCALING

System Parameter Setup

Speed Control Setup (VFD SPEED CONTROL screen)

Navigation: HOME

Value	Parameter
0 %	MINIMUM SPEED (% OF FULL SPEED)
0.0	LEVEL AT MINIMUM SPEED
0.0	LEVEL AT 100% SPEED
0	PUMP START SPEED BOOST (0-60 sec)

Speed Control Setup

Alarm Status & History

Navigation: HOME | VFD SPEED | SETTINGS

Historical Alarm View — Total of 4 Alarms

No	Message	Confirm	Activated	Confirmed	Deactivated
1	Pump 2 VFD Fault		05/17/23 13:13:59		
2	Pump 1 Overtemp	Required	05/17/23 13:13:53		
3	Pump 1 Overload	Required	05/17/23 13:13:51		
4	High Level	Required	05/17/23 13:13:46		

Buttons: Page Up | Page Down | Line Up | Line Down | Detail | Clear All | Confirm

04/04 High Level

Alarm Status & History

I/O Status

DIGITAL INPUTS	DIGITAL OUTPUTS	ANALOG INPUTS
PUMP 1 IN AUTO	PUMP 1 RUN	1600 WELL LEVEL
PUMP 1 RUNNING	PUMP 2 RUN	1025 ENCL TEMP
PUMP 1 OVERTEMP	PUMP 3 RUN	0 RESERVED
PUMP 1 FAULT	RESERVED	0 RESERVED
PUMP 2 IN AUTO	HIGH LEVEL	
PUMP 2 RUNNING	LOW LEVEL	
PUMP 2 OVERTEMP	RESERVED	
PUMP 2 FAULT	FANS ON	
PUMP 3 IN AUTO		
PUMP 3 RUNNING		
PUMP 3 OVERTEMP		
PUMP 3 FAULT		
HIGH LEVEL FLOAT		
LOW LEVEL FLOAT		
BU CNTRL ENABLED		
PHASE LOSS		

HOME

I/O Status

- All Setup Parameters Values may be viewed or changed from the front of the unit
- 24 VDC Input power
- Process Input - 4-20 mA Analog Input
- Enclosure temperature monitoring
- Modbus RTU, Modbus TCP and Ethernet IP native protocols
- Four Pump Call Relay Outputs with Status Indication
- Two Process Alarm Relay Outputs with Status Indication (Process Low Alarm has 10 second power up delay)
- 10 Second Power Up Delay (After a power interruption, the first pump call is delayed by 10 seconds)
- Adjustable Lag Pump Delays for each Pump Call Output
- Automatic alternation or Fixed Lead Pump, alternation skips disabled pumps
- Process Simulation (Automatically ends after 1 full cycle)
- 5 Digit Process Indicator
- Bar Graph Process Indicator shows at a glance fill level percentage
- Signal generator not required for analog input scaling

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