Product Information: Paperless Process Recorder | **FOOD**

Paperless Process Recorder with Legendary™ Cloud Software

Application/Specified Usage

· Paperless process recorder that will meet all PMO requirements
· Drop-in replacement for Anderson-Negele and most competitor existing paper recorders

Application Examples

· Continuous pasteurization in HTST, UHT, and Aseptic ranges
· Cold Product Recording
· Clean-In-Place (CIP)
· Clean-Out of-Place (COP)
· Juice Pasteurization
· Egg Pasteurization
· ESL Applications
· General Process Recording and Monitoring

Features

· 10" touchscreen display
· Pre-configure system information like operator list, product types, tank or silo list etc.
· Create and select from list of common annotations
· Scroll through all historical trends in local PPR display
· Internal redundant storage for data (up to 7 years) and charts (last 100 days)
· Unlimited cloud storage for both data and charts
· Data encryption during transmission to backup servers, preventing interception or falsification of records
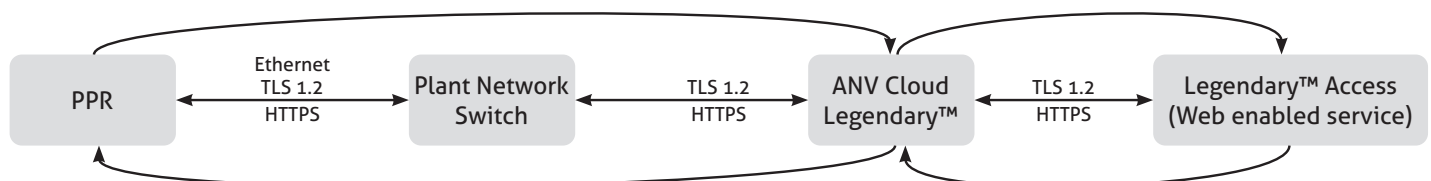· NEMA 4X enclosure

Advantages

· Create audit ready digital records that meet both your internal and PMO requirements
· Streamlined annotation and approval workflow for both on-premise PPR and Legendary™ cloud software
· Intuitive digital annotation including list of pre-populated common annotations
· Supervisors, quality team and PCQI can remotely review records, request additional notes from operators, and approve records
· Secure storage and access of all historical records for authorized users

Paperless Process Recorder (PPR)

Legendary™ Cloud Software

Touchscreen Display Interface

System Overview

API Call from PPR to Legendary™
• Send new and revised charts for review, approval and backup
• Send task and approval updates
• Check for new tasks, annotations, approvals, workflow and user updates

Read from Legendary™ by web-enabled device
• Access legal records for review and approval
• Track approval status of legal records
• Track status of responses from operator and other associates

PPR ← Ethernet TLS 1.2 HTTPS → Plant Network Switch ← TLS 1.2 HTTPS → ANV Cloud Legendary™ ← TLS 1.2 HTTPS → Legendary™ Access (Web enabled service)
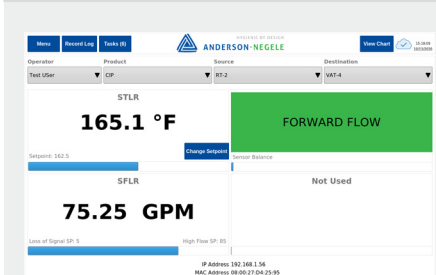
API Response from Legendary™ to PPR
• Respond with new tasks, annotations, approvals, workflow, and user updates

Write from web-enabled device to Legendary™
• Add notations
• Assign tasks (e.g. request annotation or more information)
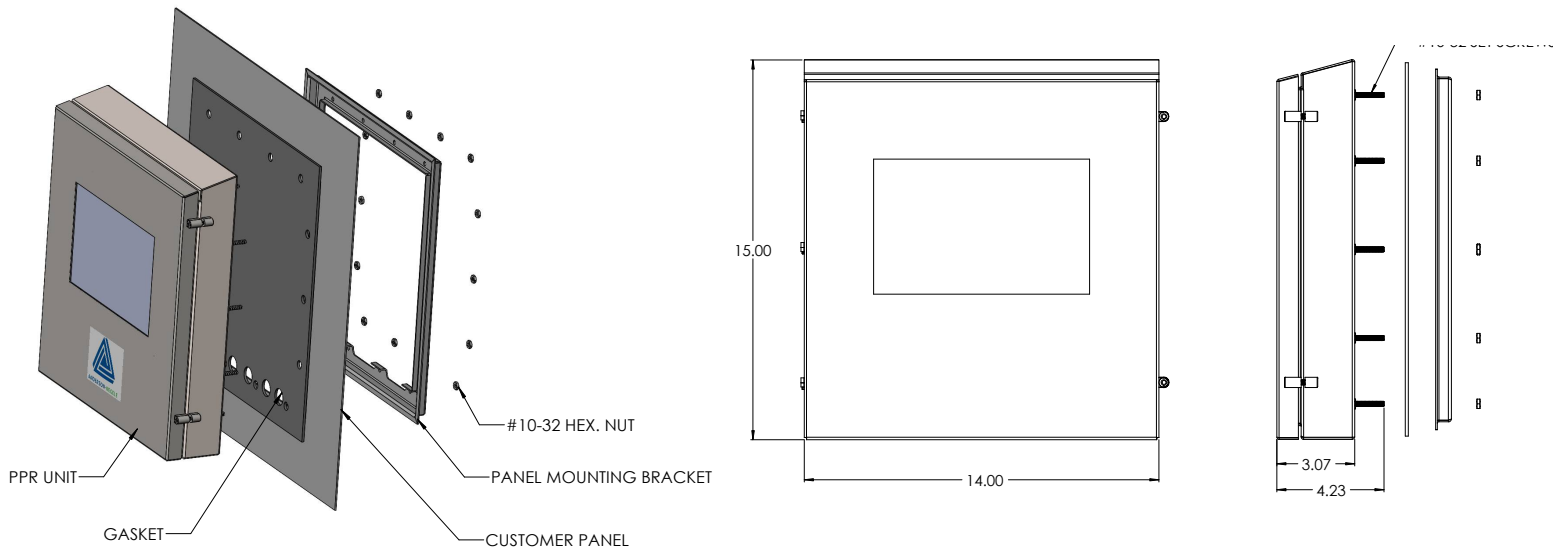• Add approvals

Specification			
Inputs	Number of Inputs	Up to 4	
	Current	0-20mA, 4-20mA	
	Voltage	0-25mV, 0-100mV, 0-1V, 0-10V, 1-10V	
	RTD	Pt100 or Pt1000, 2 or 3 wire	
	Scan Rate	100ms	
	Recording Rate	3 seconds	
	Recording Accuracy	+/- 0.3% of span	
	Ambient Temperature Effect	+/- 0.005% of span per °F deviation from 77°F (0.01% / °C from 25 °C)	
Outputs	mA Outputs	Up to 4; 0-20mA, 4-20mA	
	Relay Outputs	Up to 4; Mechanical SPDT, Normally Open or Closed	
		Contacts rated at 5 amps resistive at 115 VAC, 2.5 amps resistive at 230 VAC	
	Digital Alarms	Up to 16	
Backup Storage	Removable Storage	supplied with 32GB microSD card. Contains last 100 days of Record Images & 24 hour backup record images	
	Non-Removable Storage	4 GB eMMC (Up to 7 years of raw data and annotations. Accessible only through HMI. Cannot be exported.)	
	Cloud Storage	Unlimited storage of all PPR created record images in Legendary™	
Interface	Display	10" 1280x800 Touchscreen display with chemically strengthened glass with shatterproof screen protector	
	Operating System	Embedded Linux	
Cloud	Network	Ethernet/RJ45	
	Server	Rackspace	
	Destination Domain	https://clients.intelex.com, https://preprod-na.intelex.com and their subdomains	
	TCP and UDP Ports	HTTP(80), HTTPS(443), DNS(53), SSH(22)	
	Encryption	HTTPS / TLS 1.2 or above	
	Data Format	JSON	
	Sync frequency	15 minutes	
	IP Address	Dynamic or Static	
Power	Voltage	24-30VDC Max. Minimum 20V at PPR power supply terminals	
	Current	Max 2 amperes	
Enclosure	Mounting Option	**Wall Mount / Surface Mount**	**Panel Mount (Through Panel)**
	Material	Stainless Steel	Stainless Steel
	Conduit Openings	Qty. 6, 7/8" diameter, Located on bottom	Qty. 6, 7/8" diameter, Located on back
	Overall Dimensions	14"W x 15"H x 3"D	14"W x 15"H x 3"D
	Panel Depth	N/A	1.25"
	Panel Cutout	N/A	12.7"W x 12.7" H + 6 holes for wiring
	Front Panel Protrusion	N/A	3"
	Water Ingress Rating	NEMA 4X	NEMA 4X
	Weight	16 lbs.	16 lbs.
	Vibration	3 to 100 Hz @ 0.2g	3 to 100 Hz @ 0.2g
	Accessories	Wall mount brackets and screws	Panel mounting bracket, gasket and nuts
Environment	Operating Temperature	32-122°F	
	Humidity	10 to 90% RH, non-condensing	
Approvals	Electrical	CE (Pending)	
	Water Ingress Rating	NEMA 4X	
Warranty		2 Years	

Dimensional Drawings - Panel Mount, Back Wiring

PPR UNIT

GASKET

PANEL MOUNTING BRACKET

CUSTOMER PANEL

#10-32 HEX. NUT

15.00

14.00

3.07

4.23

Dimensional Drawings - Wall Mount, Bottom Wiring

#10-32 SCREW

WALL MOUNT BRACKET

PPR UNIT

Ø 1/4" 4X

17.00 16.00 15.00

12.20

13.20

14.00

3.07

3.26
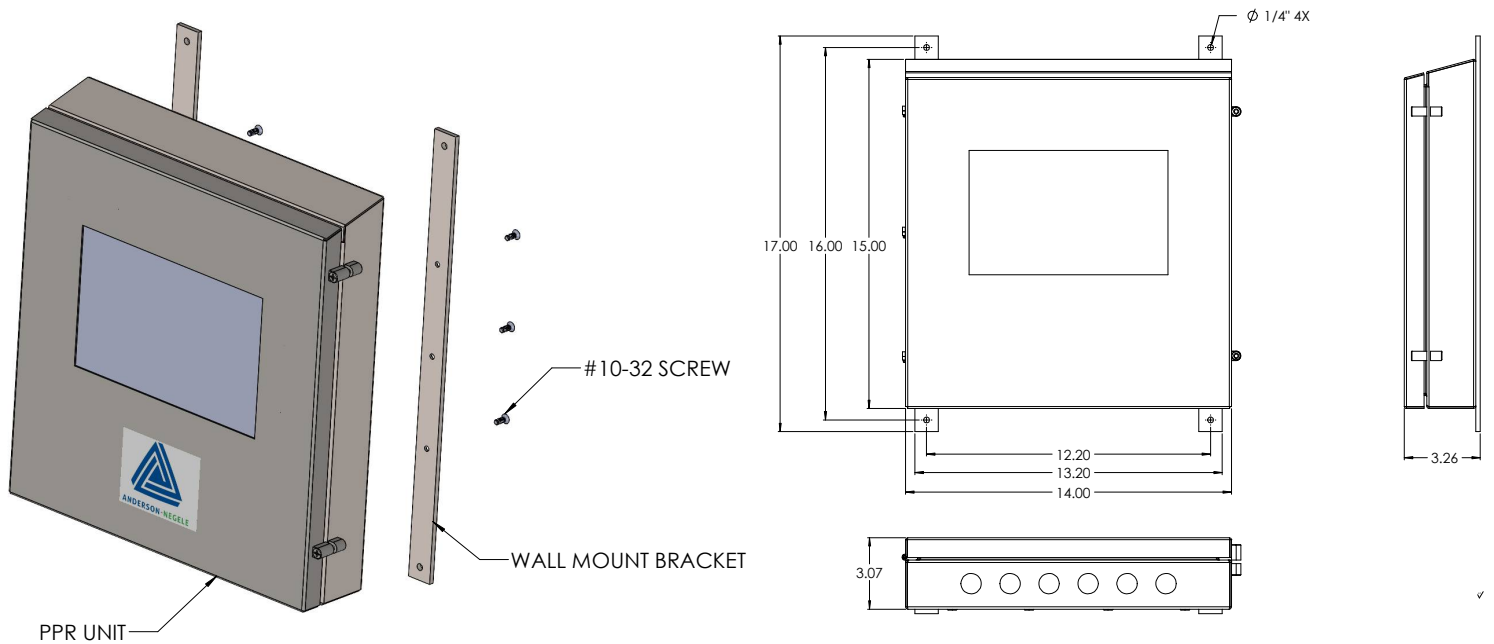
Product code

PPR   **Paperless Process Recorder**
NOTE: Requires Annual Legendary™ Cloud Subscription

Safety Thermal Limit Recorder (STLR)

XX	None	
	NOTE:	**STLR options below include STLR relay and two input cards for dual PT1000 RTD**
		STLR options require dual PT1000 sensor like SB probe (not included see page 5)
TD	STLR with 24VDC relay	
T1	STLR with 110VAC relay	
T2	STLR with 220VAC relay	

Safety Flow Limit Recorder (SFLR)
X	None
F	SFLR (only available with STLR option TD, T1, or T2; includes SFLR relay, one 4-20mA input card for SFLR and one additional universal input card)

Fixed
XXX

Additional Analog Inputs (Transmitter power supply not included, see spare parts)
With STLR Option XX
4U	Four Inputs

With STLR Option TD, T1, or T2
XX	None

mA Outputs/Re-Transmission
XX	None
2A	Two - Internally powered
4A	Four - Internally powered

Additional Relay Outputs
XX	None
2R	Two
4R	Four

Enclosure
W	Wall Mount, Bottom Wiring
P	Panel Mount w/Enclosure, Back Wiring

Tamper Evident Sealing Covers
X	No (Only available with STLR Option XX)
S	Yes

Fixed
XXXXX

PPR	TD	F	XXX	XX	4A	4R	W	S	XXXXX

LEGENDARY™ CLOUD SOFTWARE SUBSCRIPTION

Subscription purchase order must be sent to orders@anderson-negele.com directly by the end customer along with form 10035 Legendary™ Specification Sheet. Subscription fee is per PPR.

CS-LD-36-XXXXXX	3 year subscription
CS-LD-60-XXXXXX	5 year subscription

IMPLEMENTATION SERVICE

Implementation Service includes pre-configuration of PPR and Legendary™ to customer specific requirements
CS-LD-XX-STRTUP	PPR and Legendary™ Implementation Service

STLR STARTUP KIT

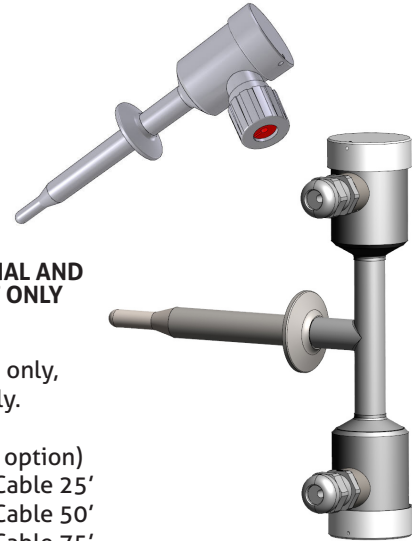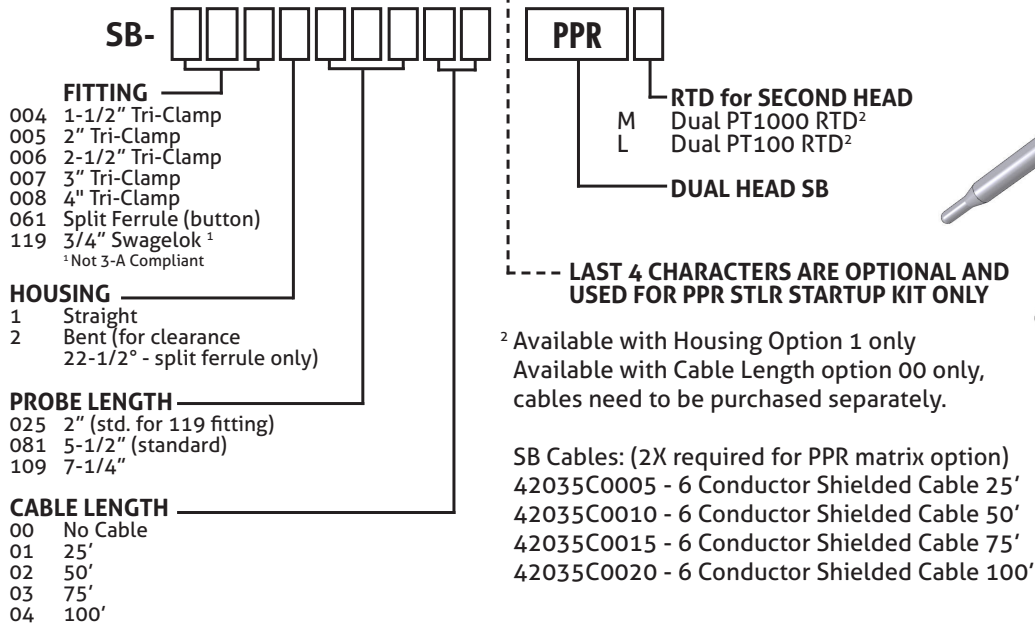|	
57219A0001	Transfer Switch Box for Series Recorder Control
SB...PPR...	Dual Head SB (See STLR Sensor Product Code on Page 5)
CS-LD-XX-STRTUP	PPR and Legendary™ Implementation Service

STLR Sensor Product Code

SB- ☐☐☐☐☐☐☐ | **PPR** ☐

FITTING
004 1-1/2" Tri-Clamp
005 2" Tri-Clamp
006 2-1/2" Tri-Clamp
007 3" Tri-Clamp
008 4" Tri-Clamp
061 Split Ferrule (button)
119 3/4" Swagelok [1]
  [1] Not 3-A Compliant

HOUSING
1 Straight
2 Bent (for clearance
   22-1/2° - split ferrule only)

PROBE LENGTH
025 2" (std. for 119 fitting)
081 5-1/2" (standard)
109 7-1/4"

CABLE LENGTH
00 No Cable
01 25'
02 50'
03 75'
04 100'

RTD for SECOND HEAD
M Dual PT1000 RTD [2]
L Dual PT100 RTD [2]

DUAL HEAD SB

- - - **LAST 4 CHARACTERS ARE OPTIONAL AND USED FOR PPR STLR STARTUP KIT ONLY**

[2] Available with Housing Option 1 only
Available with Cable Length option 00 only,
cables need to be purchased separately.

SB Cables: (2X required for PPR matrix option)
42035C0005 - 6 Conductor Shielded Cable 25'
42035C0010 - 6 Conductor Shielded Cable 50'
42035C0015 - 6 Conductor Shielded Cable 75'
42035C0020 - 6 Conductor Shielded Cable 100'

Spare Parts - Electrical

57209A0002	Motherboard (No transmitter power supply) w/ PCB screws
46835A0001	Universal Input Card (1 mA/Pt100 RTD/V input)
46836A0001	mA Output Card (2 mA outputs)
57211A0002	Relay Output Card, 2 Relays kit
57211A0001	Relay Output Card, 4 Relays kit
57210A0001	SOM Main Board kit
42064B0003	3V Coin Cell Battery
57204A0002	LVDS Cable for Touchscreen Display
46840A0001	USB Cable for Touchscreen Display
46841A0001	32 GB MicroSD Memory card
57221A0001	24VDC Transmitter Power Supply kit (4X Isolated Supply)
57214A0001	STLR Relay Board kit, 220VAC
57214A0002	STLR Relay Board kit, 110VAC
57214A0003	STLR Relay Board kit, 24VDC
46837A0001	STLR Input Card (Pt1000 RTD)
57220A0001	SFLR Relay Output Card kit

Note: Kits are sold with all required hardware for assembly

Spare Parts - Mechanical

57202A0001	Enclosure with display, panel mount, wiring from back
57202A0002	Enclosure with display, wall mount, wiring from bottom
44390A0001	Rubber Grommets (Up to 6 required per PPR)
57216A0001	Panel mount bracket hardware kit without gasket
57216A0002	Wall mount bracket hardware kit
46825A0001	Panel mount enclosure gasket
57227A0001	Input Card Sealing Cover Kit
57228A0001	STLR/SFLR with Optional 4 CH Relay Sealing Cover kit
57237A0001	STLR/SFLR without Optional 4 CH Relay Sealing Cover kit
57233A0001	4 Channel Relay Sealing Cover kit (Non STLR/SFLR)
57234A0001	Programming Jumper Cover kit for Non-STLR/SFLR w/o 4 CH Relay
46849A0001	Touchscreen Display Screen Protector Kit

Note: Kits are sold with all required hardware for assembly