

ARMORPULSE-FS

AUTOMATE. DIGITIZE. DECIDE FASTER



AN END-TO-END FUEL SENSING SOLUTION
DESIGNED TO AUTOMATE AND DIGITIZE THE ARMY'S FUEL
MANAGEMENT PROCESS ON THE TACTICAL BATTLEFIELD

1 FUEL-GRADE PRESSURE SENSOR

Engineered for accuracy, compliant with hazardous-environment certifications, and optimized for low power use and simple installation.

2 DATA TRANSPONDER

Satellite-enabled transponder providing secure, global connectivity engineered to ingest, process, and transmit fuel data required for tactical operations.

3 TAK PLUG-IN

Provides fuel availability visualizations down to bumper number and geographic position, enabling rapid situational awareness and decision-making.



OPERATIONAL ADVANTAGES



DIGITAL AUTOMATION

Automate and digitize the LOGSTAT fuel reporting process



REAL-TIME INSIGHT

Provide near-real-time, accurate information for timely decisions



OPERATIONAL TEMPO

Operate at the elevated pace and tempo required on the battlefield



PREDICTIVE EFFICIENCY

Leverage a highly cost-effective, predictive logistics solution

WWW.ARA.COM/AUSA
AUSA@ARA.COM

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SPECIFICATIONS

PLATFORM WEIGHT
~2.5 lbs (transponder)

HAZARDOUS LOCATION
ATEX / IECEx / UL
Class I, Div 1

DIMENSIONS (L x W x H)
6.0" x 3.0" x 1.5"

COMMUNICATIONS
Global satellite & RF options in development

POWER SOURCE
Internal battery with solar assist

CYBER SECURITY
Encrypted, authenticated end-to-end

BATTERY LIFE
Up to 10 years (typical)

DDIL CAPABLE
JCIDS compliant

DATA TRANSMISSION RATE
Configurable: 15 min – as required

WEIGHT (SENSOR)
~1.0 lb

OPERATING TEMP.
–20°C to 60°C

SENSOR TYPE
Fuel-grade pressure

INGRESS PROTECTION
IP67

SENSOR ACCURACY
±0.25% FS (typical)

DETAILED SPECIFICATIONS

PHYSICAL

Transponder Weight: ~2.5 lbs
Transponder Dimensions (L x W x H):
6.0" x 3.0" x 1.5"
Sensor Weight: ~1.0 lb
Sensor Dimensions: 0.75" x 6"
Mounting: Magnetic / Strap / Weld / Threaded
Housing Material:
MIL-SPEC Aluminum / Polymer

PERFORMANCE

Data Update Rate: Configurable: 1 min – 1 hr
Sensor Accuracy: ±0.25% FS (typical)
Pressure Range: 0–100 psi (typical)
Temperature Range: –20°C to 60°C
Battery Life: Up to 10 years (typical)

COMMUNICATIONS

Satellite Options: Iridium (P), Globalstar (A),
INMARSAT (C)
RF Options: RF Ground-to-Ground 850/900 MHz
Data Security: End-to-end AES-256 encryption
Authentication: Mutual authentication
Protocols: TCP/IP, MQTT, HTTPS

INTEGRATION & SOFTWARE

Data Visualization: TAK Plug-ins, Web
Dashboard, LOGSTAT Outputs
Interfaces: API / Web Services / CSV
Alerting: Thresholds, Alarms, Notifications
Fleet Management: Asset tracking,
health monitoring

ENVIRONMENTAL

Operating Temperature: –20°C to 60°C
Storage Temperature: –30°C to 60°C
Ingress Protection: IP67
Vibration / Shock: MIL-STD-810H
Hazardous Location:
ATEX / IECEx / UL Class I, Div 1

COMPLIANCE & SECURITY

Cyber Security: NIST 800-171 aligned
DDIL Capability: JCIDS compliant
Data Integrity: Tamper detection & logging
Regulatory: FCC, IC, CE, RoHS

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