



UNI-TECH
Automation Pvt. Ltd.

e-smart APU-601

e-smart APU-601 (Auxiliary Power Unit) is a cost effective controller designed for Diesel Loco Engines



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The Unitech make "APU-601 Controller" is a versatile, low cost, high speed processor, high technology aided electronic controller meant for maintaining the Critical Parameters of Diesel Loco Engine System, APU Controller monitors the critical parameters of APU engine, APU Compressor, APU DC Alternator, APU Rectifier system. The System consists of Control Unit and Display Unit. The unit's features Automatic and Manual start and stop sequencing of APU Engine and safety monitoring with warning, alarm and trip conditions.

Integration - of Functions and Connections related to the various discrete assemblies in APU control panel, maintaining MR Air Pressure and Charging the Locomotive Batteries under Loco Engine Idle conditions.

Savings - of Complications, Wiring, Panel size and Instrument Costs

Benefits - Reduced Fuel Consumption and other lubricants. Auto change over to fuel save mode under Loco Engine Idle conditions.

Combination - Functional blocks in one compact, easy to install unit.

- APU Engine,
- APU Alternator,
- APU Rectifier & APU Compressor Instrumentation
- Electrical Instrumentation and Safety for integration with Diesel LOCO Engine systems

APU Controller features

- Automation of APU Engine Start/Stop Sequences
- APU Engine, APU Compressor, APU Rectifier & APU DC Alternator Safety.
- APU Engine, APU Compressor, APU Rectifier & APU DC Alternator Instrumentation.
- Data Logging and Reminders with Memory Card.
- Communication Interfaces: Ethernet, RS-485
- GPRS/Position Tracking
- RTC with Battery back-up
- USB Interface.
- Indication of APU Engine Status & APU Mode
- TFT Colour display for visual indication.

Automation of APU Engine sequences: The unit automates the starting, stopping sequences, thus allowing completely un-attended APU Engine operations during Diesel Loco Engine idle condition.

APU Engine and Compressor Safety: The unit monitors the APU engine and APU Compressor operating parameters continuously. In the event of the parameters going outside the set limits, the controller will generate respective alarms, warnings/trip the APU engine.



FEATURES	DESCRIPTION
Operating Voltage	8-32 VDC
Auto/Manual Start/Stop Function	✓
Input Supply Reversal Protection	✓
No of Isolated Analog Inputs	2
No of Isolated Digital Inputs	4
No of Isolated Digital Outputs	3
No of Analog Inputs	13
No of Digital Outputs	11
5 Nos of ECU Signals	Indication with Audio Alarm
MPU Input	✓
Communication Interfaces	RS485, Ethernet (GSM/GPS Facility)
Monitoring of Brake Pressure	✓
Monitoring of LOCO Parameters like EOT, EWT, BCP, BATTERY VOLTAGE and LOCO CURRENT	✓
Data Logging Facility	✓
PC Connectivity	USB
RUN Hours	✓
Display	4.3" TFT Display
Mounting	Screwed Mounting
Dimensions	Controller: 200mmx260mm Display Unit: 155mmx126mm

DESIGN RITU 98906 59256 (5-17)

Manufactured by : **UNI-TECH Automation Pvt. Ltd.**

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