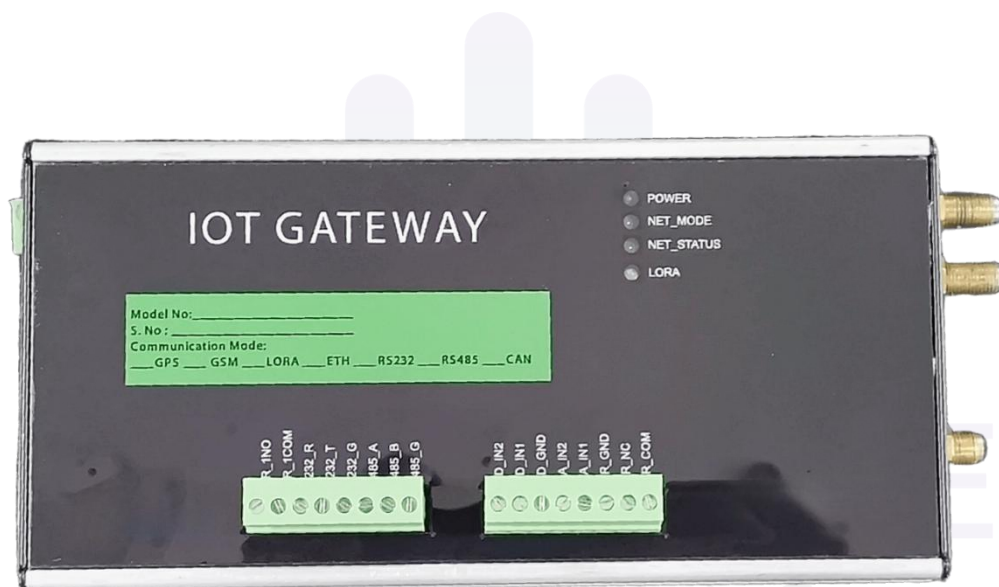
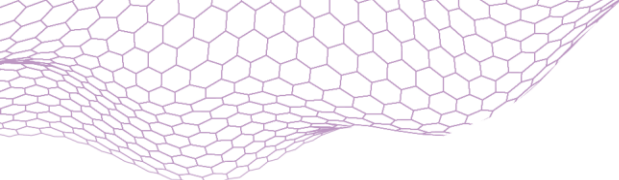




INDUSTRIAL GRADE SMART ALERT GATEWAY

SERIES DDSAG



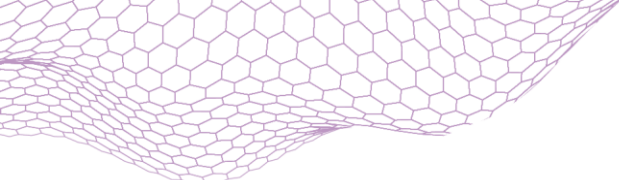


SYNOPSIS

- AN INDUSTRIAL-GRADE MODBUS RTU TO SMS & EMAIL GATEWAY DESIGNED FOR RELIABLE INDUSTRIAL MONITORING AND AUTOMATION APPLICATIONS.
- OPERATES AS A MODBUS RTU MASTER OVER RS-485 / RS-232, ENABLING DIRECT POLLING AND DATA ACQUISITION FROM FIELD DEVICES SUCH AS ENERGY METERS, SENSORS, AND CONTROLLERS.
- GENERATES REAL-TIME SMS ALERTS BASED ON CONFIGURABLE MODBUS PARAMETERS, THRESHOLD VALUES, AND STATUS CONDITIONS.
- SUPPORTS UP TO 10 MOBILE NUMBERS FOR EVENT NOTIFICATIONS, ENSURING TIMELY ALERT DELIVERY TO OPERATIONS AND MAINTENANCE TEAMS.
- CONFIGURABLE REGISTER MAPPING AND FLEXIBLE ALARM LOGIC ENABLE EASY INTEGRATION WITH EXISTING MODBUS RTU NETWORKS.
- SUITABLE FOR REMOTE SITES, UTILITY MONITORING, INDUSTRIAL PLANTS, AND CRITICAL INFRASTRUCTURE WHERE INSTANT FAULT OR STATUS ALERTING IS REQUIRED.

FEATURES

- BUILT ON A STABLE EMBEDDED OPERATING SYSTEM, PROVIDING HIGH RELIABILITY, EASY CONFIGURATION, AND LONG-TERM OPERATION IN INDUSTRIAL ENVIRONMENTS.
- OPERATES AS A MODBUS RTU MASTER, SUPPORTING CONFIGURABLE POLLING INTERVALS, MULTI-SLAVE COMMUNICATION, AND FLEXIBLE REGISTER MAPPING.
- SUPPORTS UP TO 10 CONFIGURABLE MOBILE NUMBERS FOR SMS ALERT NOTIFICATIONS WITH EVENT-BASED AND THRESHOLD-BASED TRIGGERING.
- PROVIDES USER-DEFINED ALARM LOGIC WITH SETPOINT, HIGH/LOW LIMIT, STATUS CHANGE, AND FAULT CONDITION MONITORING.
- EQUIPPED WITH RS-232 AND RS-485 INTERFACES FOR DIRECT CONNECTION TO MODBUS RTU FIELD DEVICES.
- INCLUDES BUILT-IN GSM/4G MODEM FOR RELIABLE SMS TRANSMISSION OVER CELLULAR NETWORKS.
- OFFERS LOCAL WEB-BASED CONFIGURATION INTERFACE FOR PARAMETER SETUP, MOBILE NUMBER MANAGEMENT, AND DEVICE DIAGNOSTICS.
- INCORPORATES EVENT LOGGING AND COMMUNICATION STATUS MONITORING FOR EASY TROUBLESHOOTING AND MAINTENANCE.
- DESIGNED FOR CONTINUOUS OPERATION IN INDUSTRIAL AND REMOTE SITES WITH ROBUST HARDWARE AND INDUSTRIAL-GRADE COMPONENTS.



APPLICATIONS

- INDUSTRIAL AUTOMATION AND PROCESS CONTROL SYSTEMS
- BUILDING MANAGEMENT SYSTEMS (BMS) FOR HVAC, POWER, AND SAFETY MONITORING
- UTILITY METERING AND ENERGY MANAGEMENT APPLICATIONS
- REMOTE EQUIPMENT AND INFRASTRUCTURE STATUS MONITORING
- PHARMACEUTICAL INDUSTRY – STEAM SYSTEMS, CLEANROOM PARAMETERS, AND CRITICAL PROCESS ALERTING
- FOOD & BEVERAGE INDUSTRY – COLD STORAGE MONITORING, TEMPERATURE ALERTS, AND PROCESS SUPERVISION
- OIL & GAS SECTOR – PIPELINE MONITORING, STORAGE TANK LEVEL ALERTS, AND FIELD DEVICE STATUS
- POWER GENERATION PLANTS – EQUIPMENT HEALTH, ELECTRICAL PARAMETERS, AND ENVIRONMENTAL CONDITION MONITORING
- MINING OPERATIONS – MACHINE CONDITION MONITORING AND SITE SAFETY ALERTING
- WATER AND WASTEWATER TREATMENT – LEVEL, FLOW, PRESSURE, AND WATER QUALITY PARAMETER ALERTS.
- SUPPORT 50 MODBUS RTU REGISTER.
- SUPPORT UPTO 10 REPORTING NUMBERS FOR SMS & 10 EMAIL ID FOR EMAIL ALERTS.

OUTCOMES

- **ENHANCED OPERATIONAL VISIBILITY** – PROVIDES INSTANT SMS ALERTS FOR CRITICAL EVENTS, ENABLING FASTER RESPONSE AND REDUCED DOWNTIME.
- **IMPROVED MAINTENANCE EFFICIENCY** – EARLY FAULT DETECTION THROUGH THRESHOLD-BASED AND STATUS-BASED ALERTING MINIMIZES UNSCHEDULED OUTAGES.
- **COST-EFFECTIVE REMOTE MONITORING** – ELIMINATES THE NEED FOR CONTINUOUS SCADA CONNECTIVITY AT REMOTE SITES BY USING SMS-BASED NOTIFICATIONS.
- **RELIABLE FIELD COMMUNICATION** – STABLE MODBUS RTU MASTER POLLING ENSURES CONSISTENT DATA ACQUISITION FROM MULTIPLE SLAVE DEVICES.
- **REDUCED RESPONSE TIME** – ALERTS DELIVERED TO UP TO 10 MOBILE NUMBERS ENABLE QUICK DECISION-MAKING BY OPERATIONS AND MAINTENANCE TEAMS. SIMPLIFIED INTEGRATION – EASY DEPLOYMENT WITH EXISTING MODBUS RTU NETWORKS WITHOUT MAJOR SYSTEM MODIFICATIONS.
- **SCALABLE MONITORING SOLUTION** – CONFIGURABLE PARAMETERS AND ALARM LOGIC ALLOW ADAPTATION TO CHANGING SITE REQUIREMENTS.

COMMUNICATION

- **AVAILABLE INTERFACES:** RS-485 AND RS-232 FOR MODBUS RTU FIELD DEVICE CONNECTIVITY, ETHERNET FOR CONFIGURATION AND NETWORK ACCESS, AND BUILT-IN GSM/4G FOR SMS ALERT TRANSMISSION.
- **GSM CONNECTIVITY:** INTEGRATED CELLULAR MODULE SUPPORTING SMS-BASED EVENT NOTIFICATIONS TO MULTIPLE MOBILE NUMBERS.
- **SERIAL COMMUNICATION:** INDUSTRIAL-GRADE RS-485 INTERFACE SUPPORTING MULTI-DROP MODBUS RTU NETWORKS WITH CONFIGURABLE BAUD RATE, PARITY, AND SLAVE ADDRESSING.
- **PROTOCOL SUPPORT:** MODBUS RTU MASTER MODE FOR DIRECT POLLING OF FIELD DEVICES AND PARAMETER MONITORING.

STANDARD & BAND

- FDD-LTE Band B1/3/5/8
- TDD-LTE Band B34/38/39/40/41
- GSM/GPRS 900/1800MHz
- GPRS Terminal Device Class: Class B
- GPRS Coding Schemes CS1 to CS4

BANDWIDTH

- FDD LTE (Mbps) : Downstream rate 10.3Mbps, Uplink rate 5.1Mbps
- TDD-LTE : Downstream rate 9.1Mbps, Uplink rate 3.1Mbps
- GPRS (Kbps) : Downstream rate 85.6 Kbps, Uplink rate 85.6 Kbps
- TX power : <32 dBm
- RX sensitivity : < -93.3 dBm
- Antennae gain : 3dB. Higher gains possible.

POWER SUPPLY

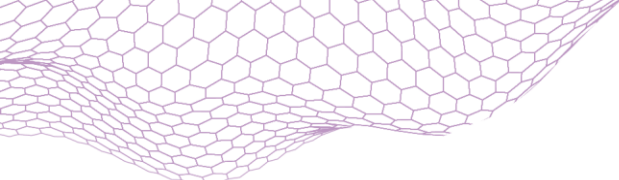
Power Supply	12V DC
Max. Current	2 A
Protections	Reverse voltage Protection

PHYSICAL CHARACTERISTICS

Shell Material	Industrial-grade Metal enclosure
Enclosure Type	Compact, ruggedized design
IP Rating	IP65
Mounting	Wall-mounted / DIN rail

ENVIRONMENTAL

Operating Temperature	-20 °C to 70 °C
Relative Humidity	10 to 90%, non-condensing



ORDERING CODE

DDSAG 485 M CL

DDSAG	Industrial Grade Smart Alert Gateway
485	RS485 Port
M	Modbus Supported
CL	Fixed

