D-500
INTERNET ENABLED GENSET CONTROLLER
MULTIFUNCTIONAL

THE SAME UNIT IS A ...

- AMF UNIT WITH UNINTERRUPTED TRANSFER
- ATS CONTROLLER
- REMOTE START CONTROLLER
- ENGINE CONTROLLER
- REMOTE DISPLAY UNIT

REDUCE YOUR STOCK ITEMS!
EASY PROGRAMMING

- Easy to use PC configuration program: Rainbow Plus
- PC program connects through USB + RS485 + Internet
- Remote parameter setting through Internet
- All parameters front panel adjustable
- Detailed training material
DATA PORTS

- ETHERNET 10/100 Mb
- INTERNAL GPRS MODEM
- RS-485 (MODBUS RTU)
- RS-232 (EXTERNAL MODEM)
- USB DEVICE (PC CONNECTION)
- USB HOST (LONG TERM DATA RECORDING)
- MICRO-SD CARD (LONG TERM DATA RECORDING)
CONNECTION CAPABILITIES

D-500

- GSM
- SMS
- GPS Module
- External Modem
- Electronic Engine
- USB Memory
- Micro-SD Memory
- USB GPS Module
- USB Flash Memory
- Ethernet
- HMI Display
- Remote Display Panel
- PC
- Embedded Web Server
- SNMP Communication
- Central Monitoring
- Geo Location
- E-mail
UP TO 4 DIFFERENT PHONE NUMBERS ALLOWED
E-MAIL SENDING

INTERNET

UP TO 3 DIFFERENT E-MAIL ADDRESSES ALLOWED
INTERNET FEATURES

- EMBEDDED WEB SERVER
- WEB MONITORING
- WEB PROGRAMMING
- PARAMETER SETTING THROUGH INTERNET
- CENTRAL MONITORING THROUGH INTERNET
- E-MAIL SENDING
- MODBUS TCP/IP
- SNMP
REMOTE MONITORING

CONTROLLER

INTERNET

RAINBOW SCADA SERVER

GENERATOR

ANY WEB BROWSER

SMART PHONE
INTERNET CONNECTION

LAN + GPRS CONNECTIONS ENABLED!

ETHERNET PORT

INTERNAL GPRS MODEM

INTERNET

OR

RS 232

GPRS MODEM

GPRS MODEM

DUAL CONNECTIONS ALLOWED FOR ADDITIONAL SAFETY
EASY INSTALLATION - ETHERNET

ETHERNET CONNECTION SUPPORTS **LAN** AND **LOCAL IP**!

- **NO STATIC IP** REQUIRED
- **NO PORT REDIRECTION** REQUIRED
- **NO DATA SERVER** REQUIRED
- **JUST PLUG & PLAY**
EASY INSTALLATION - GPRS

GPRS CONNECTION SUPPORTS **DYNAMIC IP AND LOCAL IP**!

- NO **REAL IP** REQUIRED
- NO **STATIC IP** REQUIRED
- NO DATA SERVER REQUIRED
- PLUG & PLAY WITH ANY DATA SIM CARD

CONTROLLER | DKG 090 | RS 232 | GPRS MODEM | RAINBOW SCADA SERVER
RAINBOW SCADA PROGRAM

PROGRAM RUNS ON SERVER

INTERNET

ACTIVE CONNECTIONS

RAINBOW SCADA SERVER

ANY WEB BROWSER

SMART PHONE

RAINBOW SCADA SERVER SUPPORTS 60’000 ACTIVE CONNECTIONS
CHART MODE DISPLAY

MONITOR YOUR COMPLETE FLEET ON ONE SCREEN

THE COLOUR OF THE BOX SHOWS DEVICE STATUS!
MOBILE GENSET SUPPORT

CONTROLLERS SHOWN AT TRUE COORDINATES WITH GPS SUPPORT

GPS SATELLITE

INTERNET

RAINBOW SCADA SERVER

SET LOCATION ALARMS!

MONITOR YOUR MOBILE FLEET ON-LINE!
MOBILE GENSET SUPPORT

LOCATION DETERMINATION OVER GSM NETWORK

MONITOR YOUR MOBILE FLEET ON-LINE!
TABLET PC & SMART PHONE SUPPORT

ALL SMART PHONE WEB BROWSERS SUPPORTED

NO NEED TO DOWNLOAD APPS!

ALL WEB BROWSERS ARE SUPPORTED

INTERNET

RAINBOW SCADA SERVER
CREATE YOUR OWN ACCOUNT

Rainbow Scada Login

datakom

Login

Manage

LOGIN AND USE «MANAGE» OPTION

RAINBOW SCADA MANAGING SCREEN

NO NEED TO WAIT FOR SUPPORT
CREATE YOUR OWN SUB_USERS

INTERNET

RAINBOW SCADA SERVER

RESELL YOUR DATA AND HAVE REVENUE!
DATA SECURITY

DATA IS SENT TO RAINBOW SCADA SERVER ONLY!

CONTROLLER

LOCAL IP

FIREWALL

RAINBOW SCADA SERVER

NOBODY CAN REACH YOUR CONTROLLER!
DETAIL MONITORING

MONITOR ONLINE & REAL TIME

MONITOR WITH PC, TABLET OR SMARTPHONE
REMOTE ALARM MONITORING

MONITOR ONLINE & REAL TIME

MONITOR WITH PC, TABLET OR SMARTPHONE
REMOTE CONTROL & REMOTE FAULT RESET

RESET ALARMS ONLINE & REAL TIME

RESET ALARMS WITH PC, TABLET OR SMARTPHONE
REMOTE FAULT RESET VIA SMS

YOUR CRITICAL SITE IS ALWAYS UP!

RESET ALARMS!
REMOTE PARAMETER EDIT

CONTROLLER

INTERNET

RAINBOW PLUS PROGRAM

SAVE TIME AND SERVICE COST

RAINBOW SCADA SERVER
DATA ANALYSIS

PAST DATA IS STORED ON SERVER!

DATA CAN BE SAVED AS:
- JPG FILES
- EXCEL FILES

ANALYSE PAST PERFORMANCE OF YOUR SYSTEM!
ONLINE ALARM MANAGEMENT

DESIGNED FOR CONTROL CENTERS

ALARM HISTORY IS RECORDED INTO DATABASE
CUSTOMER LOGIN HISTORY RECORDING

MONITOR SUB-USER ACTIVITIES

LOGIN HISTORY IS RECORDED INTO DATABASE

HELPS TO INCREASE SECURITY!
DETAILED REPORTING

ALLOWS TIME-FRAMED REPORTING OF SELECTED PARAMETERS

- FUEL CONSUMPTION REPORTS
- kW/fuel EFFICIENCY REPORTS
- POWER GENERATION REPORTS
- POWER CONSUMPTION REPORTS
- AVERAGE VALUES
- MIN-MAX VALUES

PROVIDES HELP FOR BETTER MANAGEABILITY OF YOUR FLEET!
REMOTE CONTROL OF AUXILIARY DEVICES
MONITOR ALL DATAKOM PRODUCTS

GENSET CONTROLLERS

POWER ANALYSERS

REACTIVE POWER CONTROLLERS

COMPRESSOR CONTROLLERS

INTERNET

PROTECTION RELAYS

RAINBOW SCADA SERVER
INTEGRAL APPROACH

MONITOR THIRD PARTY & COMPETITOR PRODUCTS

ENERGY METERS

INDUSTRIAL CONTROLLERS

COMPETITOR GENSET CONTROLLERS

DKG-210 UNIVERSAL INTERNET GATEWAY

INTERNET

ETHERNET PORT

GPRS MODEM

RAINFOW SCADA SERVER

DATAKOM
COST ADVANTAGE

MONITOR YOUR SYSTEM WITH LOWER DATA COST!

- CONTROLLERS CONNECT AUTOMATICALLY
- NO NEED TO QUERY THE CONTROLLER
- ALL DATA IS SENT IN A SINGLE IP PACKET
COST ADVANTAGE

EACH CONTROLLER COMES WITH 2 YEARS FREE MONITORING

- 2 YEARS FREE MONITORING
- 6 MONTHS FREE REMOTE CONTROL
- 6 MONTHS FREE REMOTE PARAMETER EDIT
- 6 MONTHS FREE DATA ANALYSIS
IMMEDIATE FAULT DETECTION

REDUCE CUSTOMER’S DOWN TIME WITH FASTER INTERVENTION

YES !

NO !
FAULT SENSING BEFORE FAILURE

GENERATE ALERTS BEFORE THEY BECOME EMERGENCIES

- Low Fuel
- Low Oil
- Low Battery
- Not in Auto
- Service Request

DATAKOM
REMOTE FUEL FILLING MONITORING

CONTROLLER COUNTS FLOW METER PULSES

FUEL PUMP → FLOW METER → FUEL TANK

PULSE OUTPUT

INTERNET

SAVE YOUR MONEY BY ELIMINATING FUEL FILLING FRAUDS!
FUEL CONSUMPTION MONITORING

CONTROLLER COUNTS FLOW METER PULSES

GENERATOR

FLOW METER

PULSE OUTPUT

INTERNET

MONITOR YOUR GENSET’S kW/FUEL EFFICIENCY
REMOTE SERVICE MONITORING

REDUCE YOUR SPARE PARTS COST BY SERVICE PLANNING!

AVOID UNNECESSARY SERVICE VISITS
LESS MANPOWER FOR SERVICE

AVOID UNNECESSARY SITE VISITS

NO !

YES !
ADVANTAGES

- Generate alerts before they become emergencies
- Reset faults from your control room
- Test your genset from your control room
- Reduce your down time with faster intervention
- Avoid unnecessary site visits
- Reduce your spare part cost by service planning
- Eliminate fuel theft
- Eliminate energy theft
- Eliminate fuel filling frauds
- Have your critical site always up
- Have data security
- Integrate third party products in the same network
- Control your entire remote station via D-500