

PRODUCT CATALOGUE

Generator Set Controllers

Protection, Control and Metering





Automatic Gen-Set Controller
with Transfer Switching **2**



Automatic Gen-Set Controller **4**



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Automatic Gen-Set Controllers with Transfer Switching



- CanBus J1939 ECU communication
- Parameter configuration via USB port of your notebook
- Authorised access, secure communication
- Translate LCD text for your language
- Log last 50 events & alarm information with measured values
- Statistics records
- Generator phase sequence control
- Remote Start/Stop, Speed and Idle mode control via J1939
- Power factor measurement for 3 phases
- 4 resistive sender inputs for Level, Temperature, Oil Pressure and Spare
- Selectable Resistive sender types; Pt-100, VDO, US, GM, Ford, Datcon, etc..
- Speed sensing from alternator voltage or magnetic pickup (Trans-AMF.MPU)
- 3 phase Load current and earth current measurement
- Configurable 10 inputs and 4 outputs
- ECU power, ECU stop, Stop or Fuel solenoid selection
- Programmable weekly working permit calendar
- Maintenance warning, Red (Shutdown) and Yellow (Warning) alarm lights
- Navigation and Shortcut buttons for easy use
- Exercise at programmed time intervals
- Load Test selection
- Automatic transfer switching control and engine control
- Compatible to Diesel or Gas generators
- Auto, Manual and Test modes
- Active, Reactive, Apparent power measurement
- Adjustable Start, Load and Stop timers
- SPN, FMI and OC values reading from engines via J1939

Pre-Alarm

- Engine temperature
- Oil pressure
- Fuel level
- Over / Under voltage
- Over / Under frequency
- Over / Under speed

Fail Monitoring

- Emergency stop
- Multiple engage fail
- Failed to start
- Low oil pressure
- High temperature
- Speed failure
- Voltage
- Charging fail
- Shutdown
- Warning

Warning & Electrical trip

- Earth fault
- Over current
- Short circuit

Alarm

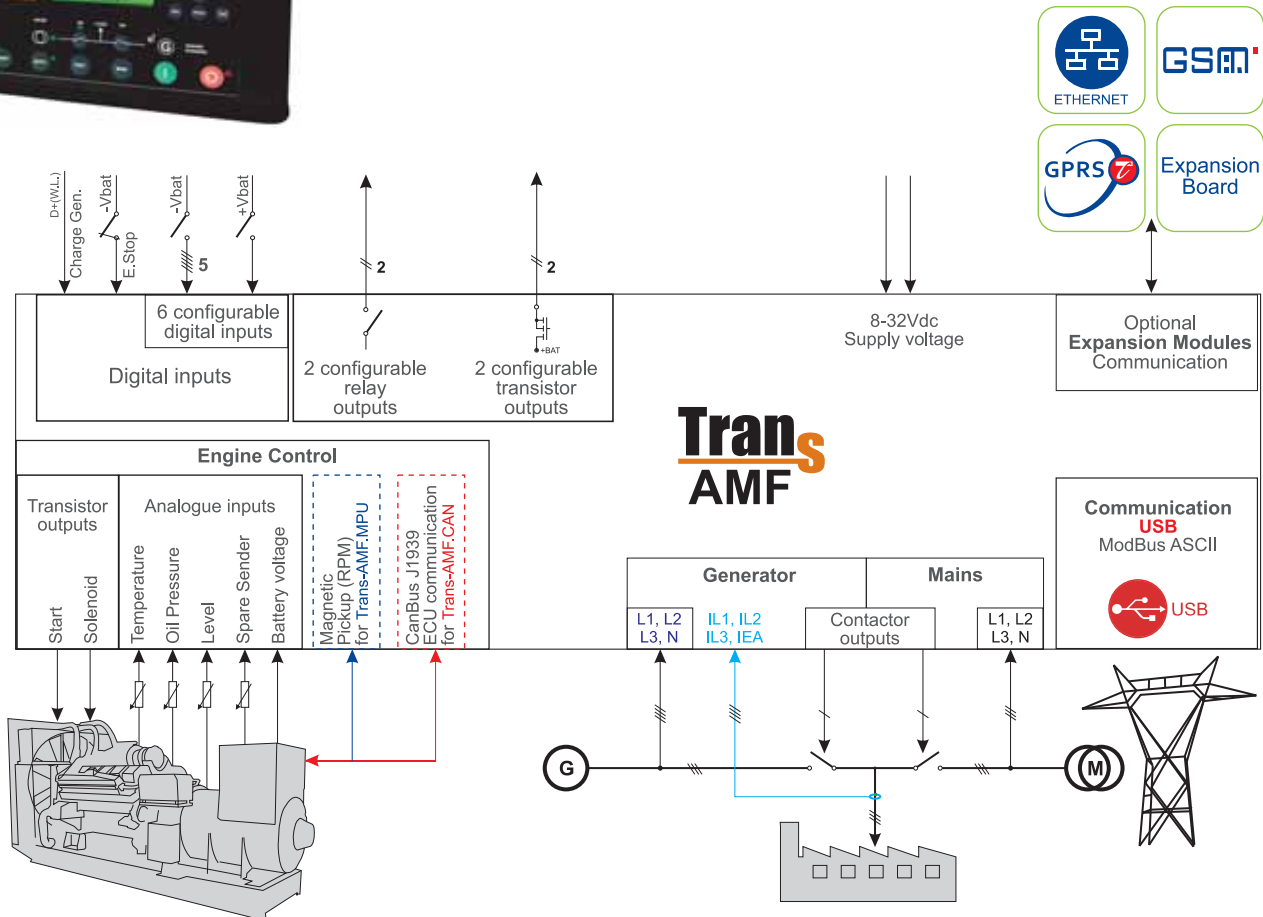
- Mains breaker not opened
- Mains breaker not closed
- Generator breaker not opened
- Generator breaker not closed

Controls

- Fuel and Stop solenoid
- ECU power and stop
- Starter motor
- Automatic generator start
- Load transfer to mains
- Preheat
- External alarm horn
- Engine cooling
- Idle mode

Error

- Over / Under speed
- Speed loss
- Earth fault
- Fuel level
- Battery low
- Battery high
- Maintenance
- Over current
- Short circuit
- Engine stop
- CanBus
- Charge alternator



- Dimensions : 229mm x 152mm x 41mm
- Panel Cut-Out : 182mm x 135mm
- Protection : IP65 at front panel
- Weight : Approximately 0,53Kg
- Operating temperature : -20°C to +70°C
- DC battery supply voltage : 8 to 32Vdc, max. operating current is 360mA
- CT secondary : 5A
- Sender Measurement : 0 to 1300 ohm, accuracy: 1%FS, resolution: 1 ohm

Order Information	
Trans-AMF.CAN	Automatic Gen-Set controller with transfer switching, LCD display, J1939 ECU communication
Trans-AMF.MPU	Automatic Gen-Set controller with transfer switching, LCD display, speed sensing from magnetic pickup



Automatic Gen-Set Controllers

- CanBus J1939 ECU communication
- Parameter configuration via USB port of your notebook
- Authorised access, secure communication
- Translate LCD text to your language
- Log last 50 events & alarm information with measured values
- Statistics records
- Generator phase sequence control
- Remote Start/Stop, Speed and Idle mode control via J1939
- Power factor measurement for 3 phases
- 4 resistive sender inputs for Level, Temperature, Oil Pressure and Spare
- Selectable Resistive sender types; Pt-100, VDO, US, GM, Ford, Datcon, etc..
- Speed sensing from alternator voltage or magnetic pickup
- 3 phase Load current and earth current measurement
- Configurable 10 inputs and 4 outputs
- ECU power, ECU stop, Stop or Fuel solenoid selection
- Maintenance warning, Red (Shutdown) and Yellow (Warning) alarm lights
- Navigation and Shortcut buttons for easy use
- Load Test selection
- Engine control
- Compatible to Diesel or Gas generators
- Auto, Manual and Test modes
- Active, Reactive, Apparent power measurement
- Adjustable Start, Load and Stop timers
- SPN, FMI and OC values reading from engines via J1939

Pre-Alarm

- Engine temperature
- Oil pressure
- Fuel level
- Over / Under voltage
- Over / Under frequency
- Over / Under speed

Fail Monitoring

- Emergency stop
- Multiple engage fail
- Failed to start
- Low oil pressure
- High temperature
- Speed failure
- Voltage
- Charging fail
- Shutdown
- Warning

Warning & Electrical trip

- Earth fault
- Over current
- Short circuit

Alarm

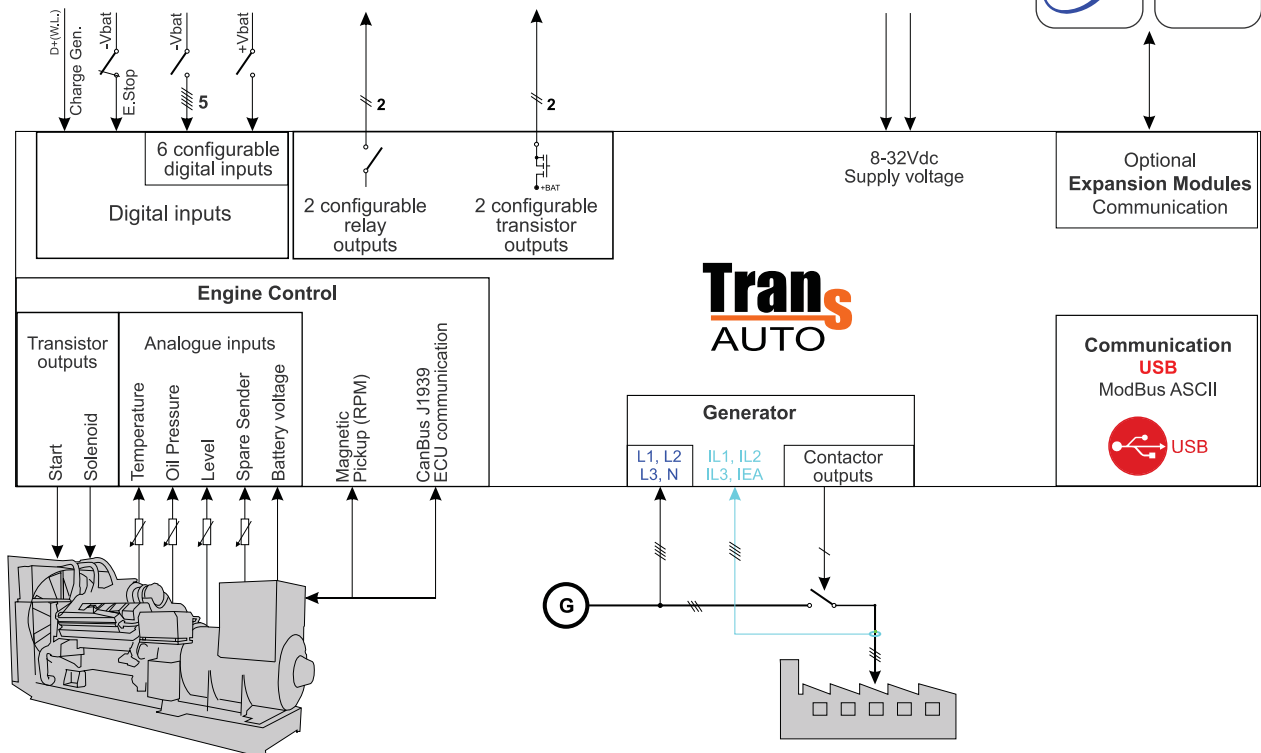
- Generator breaker not opened
- Generator breaker not closed

Controls

- Fuel and Stop solenoid
- ECU power and stop
- Starter motor
- Automatic generator start
- Preheat
- External alarm horn
- Engine cooling
- Idle mode

Error

- Over / Under speed
- Speed loss
- Earth fault
- Fuel level
- Battery low
- Battery high
- Maintenance
- Over current
- Short circuit
- Engine stop
- CanBus
- Charge alternator



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- Panel Cut-Out : 182mm x 135mm
- Protection : IP65 at front panel
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- Operating temperature : -20°C to +70°C
- DC battery supply voltage : 8 to 32Vdc, max. operating current is 360mA
- CT secondary : 5A
- Sender Measurement : 0 to 1300 ohm, accuracy: 1%FS, resolution: 1 ohm

Order Information

Trans-AUTO

Automatic Gen-Set controller, LCD display, J1939 ECU communication

**Automatic Transfer
Switching Controllers**



- Parameter configuration via USB port of your notebook
- Authorised access, secure communication
- Translate LCD text to your language
- Log last 50 events & alarm information with measured values
- Statistics records
- Generator phase sequence control
- Power factor measurement for 3 phases
- 3 phase Load current and earth current measurement
- Configurable 6 inputs and 4 outputs
- Programmable weekly working permit calendar
- Maintenance warning, Red (Shutdown) and Yellow (Warning) alarm lights
- Navigation and Shortcut buttons for easy use
- Exercise at programmed time intervals
- Load Test selection
- Automatic transfer switching control
- Auto, Manual and Test modes
- Active, Reactive, Apparent power measurement

Pre-Alarm

- Over / Under voltage
- Over / Under frequency
- Over / Under speed

Fail Monitoring

- Emergency stop
- Speed failure
- Voltage
- Shutdown
- Warning

Warning & Electrical trip

- Earth fault
- Over current
- Short circuit

Alarm

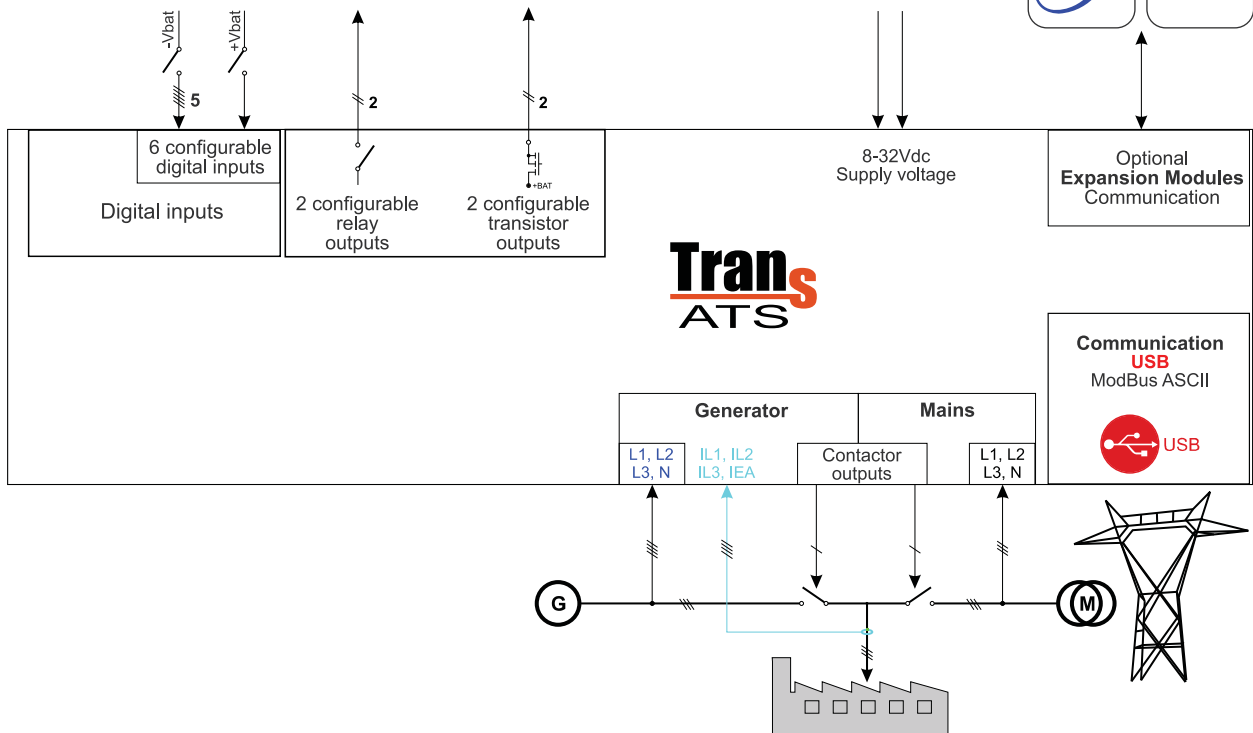
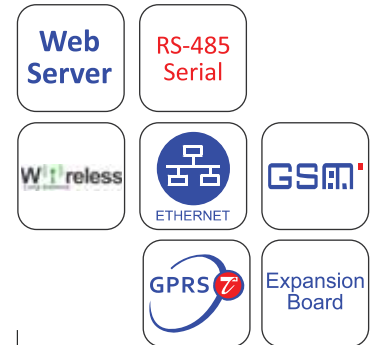
- Mains breaker not opened
- Mains breaker not closed
- Generator breaker not opened
- Generator breaker not closed

Controls

- Automatic generator start
- Load transfer to mains
- External alarm horn

Error

- Over / Under speed
- Speed loss
- Earth fault
- Battery low
- Battery high
- Maintenance
- Over current
- Short circuit
- Engine stop
- CanBus



- Dimensions : 229mm x 152mm x 41mm
- Panel Cut-Out : 182mm x 135mm
- Protection : IP65 at front panel
- Weight : Approximately 0,53Kg
- Operating temperature : -20°C to +70°C
- DC battery supply voltage : 8 to 32Vdc, max. operating current is 360mA
- CT secondary : 5A

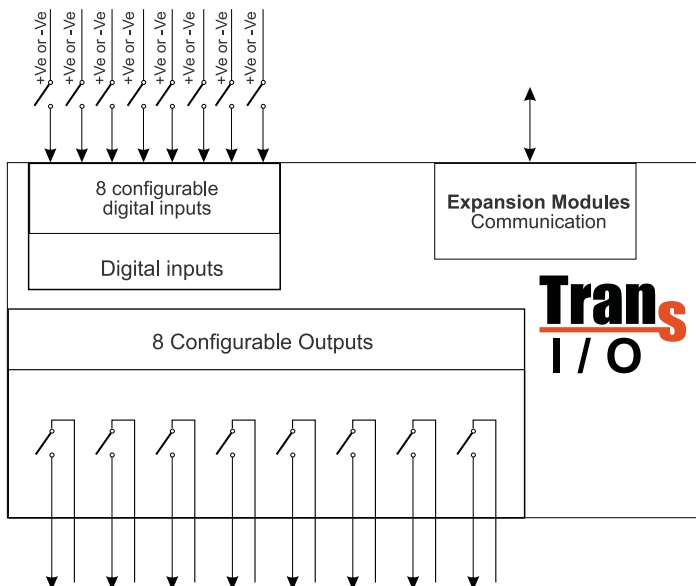
Order Information	
Trans-ATS	Automatic transfer switching controller, LCD display,

**Trans Series
Expansion
I/O Module**

Expansion Board



- Easy plugging to all Trans series controllers
- Configurable 8 inputs and 8 outputs
- Each Input and Output configurable by user or select from list
- Selectable hardware type of inputs by +Ve or -Ve
- Selectable NO or NC input polarity
- Selectable NO or NC output polarity
- Adjustable input active delay
- Can be used together with remote monitoring modules



Configurable output selections

- Audible Alarm
- Auto start inhibit
- Auxiliary Mains Failure
- Battery High or Low Voltage
- Calling for scheduled run
- Charge alternator failure
- Common Alarms
- Coolant Temperature Alarm
- Digital and Expansion Inputs Active
- Earth Fault
- Electric Cooling Fan control
- Emergency Stop
- Fail to Start, Stop
- Fuel relay energised
- Gas Engine Ignition Output
- Generator at Rest
- Generator Available
- Generator Closed Auxiliary
- Generator Breaker Failed
- Generator Frequency Alarm
- Generator Voltage Alarm
- Generator Load Inhibit
- Generator Stopping
- Horn Output Latched or Pulsed
- Lamp Test
- Level Prealarm
- Maintenance Due Alarm
- Mains Closed Auxiliary
- Mains Breaker Failed to Close
- Mains Breaker Failed to Open
- Mains Failure
- Mains Frequency Alarm
- Mains Voltage Alarm
- Mains Load Inhibit
- No Loading Command
- Oil Pressure Alarm
- Over Current

Configurable output selections

- Over or Under Speed Alarm
- Panel Lock
- PreHeat
- Remote Start Present
- Remote Stop Delay
- Short Circuit
- Start Relay Energised
- Starting Alarm
- System in Auto, Manual, Stop, Manual or Test Mode
- ECU Power or Stop
- Smoke Limiting
- Low Temperature
- Generator and Mains Breakers Control
- Oil Temperature Alarm
- Fuel Pump Control
- Air Flap Control
- or User Configurable

Configurable input selections

- Auxiliary Mains Fail
- Simulate Lamp Test Button
- Simulate Horn Reset Button
- Simulate Alarm Reset Button
- Simulate Auto Button
- Simulate Test Button
- Simulate Manual Button
- Simulate Start Button
- Simulate Stop Button
- Generator Closed Auxiliary
- Generator Load Inhibit
- Mains Closed Auxiliary
- Mains Load Inhibit
- Auto Restore Inhibit
- Auto Start Inhibit
- Panel Lock
- Scheduled Runs Inhibited
- Transfer To Generator/Open Mains
- Transfer To Mains/Open Generator
- or User Configurable

Order Information

Trans-I/O

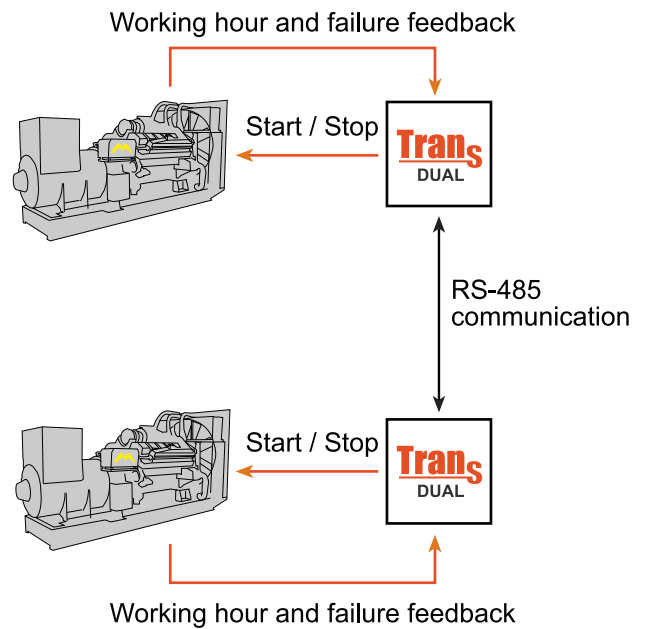
Expansion Input / Output Module for Trans Series Controller



**Trans Series
Failure and time interval
dual working**



- Easy plugging to Trans-AMF and Trans-Auto controllers
- Dual GenSet working by time interval
- Priority selection
- When the failure situation, automatically start to another GenSet
- Equal aging by working hours
- Definable time interval period
- Load transfer without power interruption



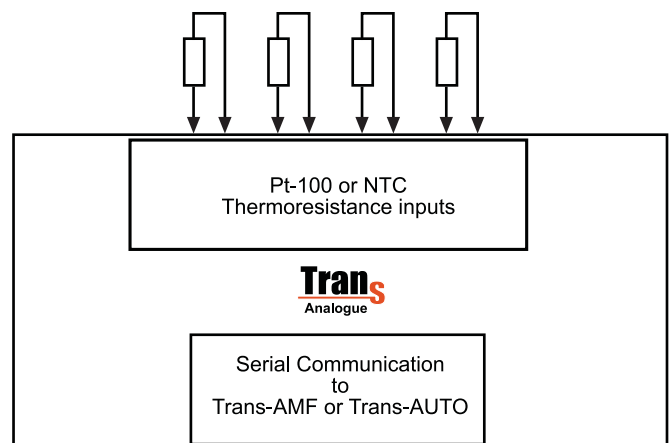
Order Information	
Trans-Dual	Failure and time interval dual working Module

**Trans Series
Analogue Inputs
Expansion Module**

Analogue
Inputs
Expansion
Board



- Easy plugging to Trans-AMF & Trans-AUTO
- 4 x Pt-100 (2 wires) thermoresistance inputs
- Alternator winding temperature measurement
- Ambient and exhaust temperature measurement
- Fuel tank or engine block temperature control
- Visualisation and control measured values by Trans Series controllers and Gen-Agent SCADA software
- Working with all communication modules

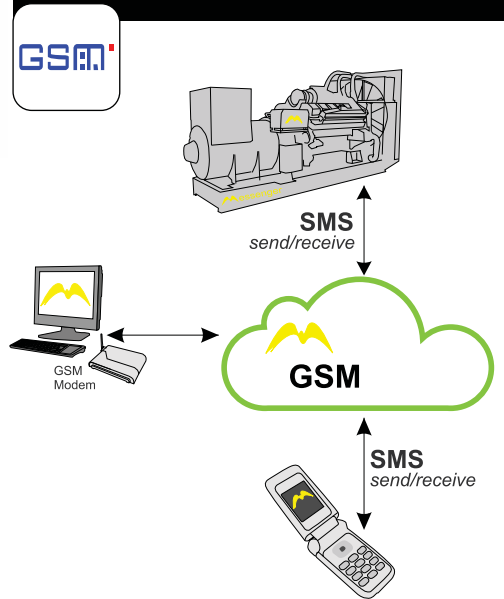


Order Information

Trans-AnalogueRTD	Analogue inputs and alarm expansion modules 4x Pt-100 inputs (2 wires)
Trans-AnalogueNTC	Analogue inputs and alarm expansion modules 4x NTC-10K inputs

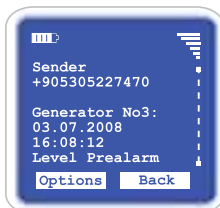


Trans Series GSM Communication Module

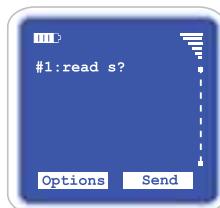


The status of your generator is only a text message away :)

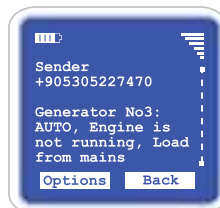
- Easy plugging to all Trans Series controllers
- Two-way SMS communication (GenSet to mobile)
- Controls the generator and monitors status information of the generator by SMS
- Remote control via GSM
- Sends alarm informations pre-defined GSM numbers
- User may control the device, CLEAR alarms, RESET,
- Change MODE's, STOP, START, access the PARAMETER's of device,
- Change the parameters and enquire information about generator's active status



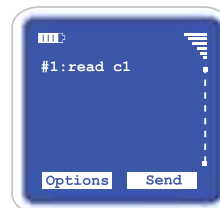
Notification of alarm status by SMS



Enquire status by SMS



Receive feed-back message for status



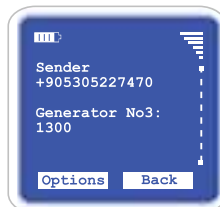
Send command by SMS



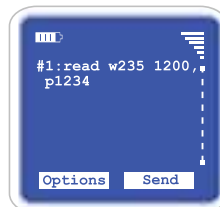
Acknowledgement message for command sent



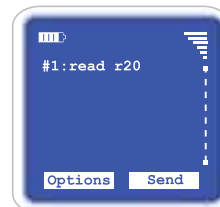
Enquire for parameter values by SMS



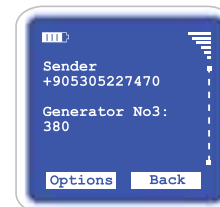
Feed-back message for parameter values read



Change parameter values by SMS



Enquire for active measured values



Feed-back message for active measured values

Order Information

Trans-Messenger

Remote Control & Visualisation Module, communication by GSM and two way SMS

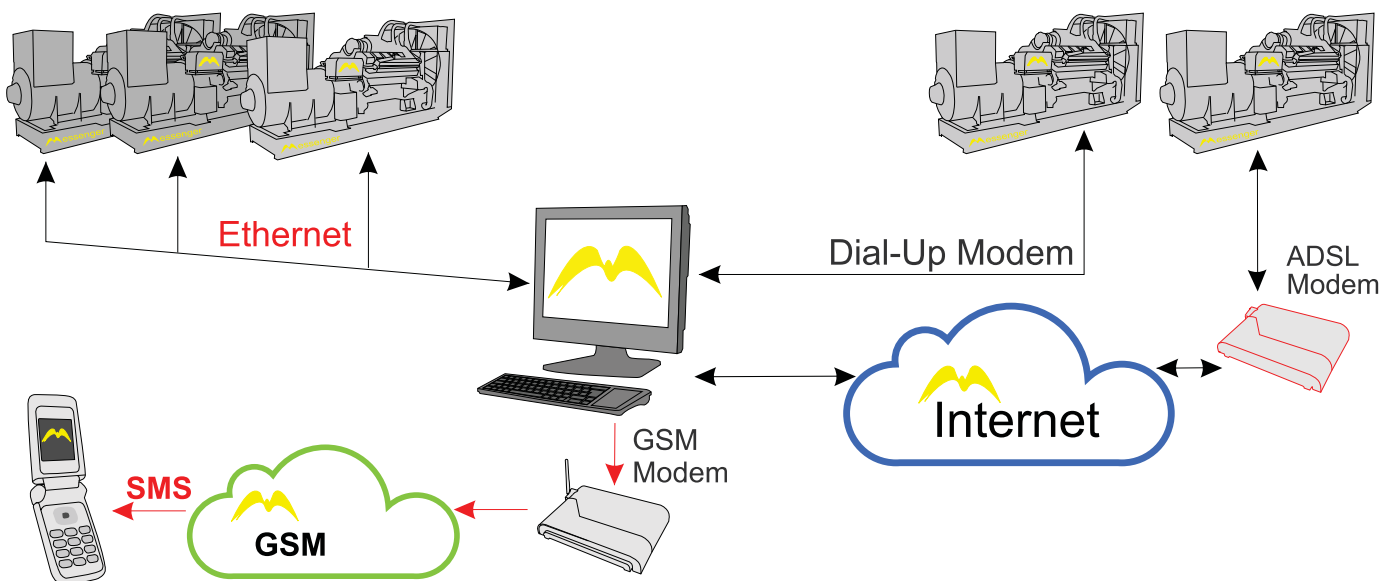
**Trans Series
Ethernet / Dial-up
Communication Module**



**Remote
Control & Visualisation
for Multiple Gen-Sets**



- Easy plugging to all Trans Series controllers
- Ethernet and Dial Up communication
- Call-Back selection by Ethernet and Dial Up
- Maintenance management of multiple Gen-Sets from a central computer
- Alarm observation and archive
- Easy adjustable IP adress, Gateway, DNS
- DHCP supported
- ModBus over TCP/IP communication protocol
- 10/100 Base T ethernet communication



Order Information

Trans-Messenger.PRO

Remote Control & Visualisation Module,
communication by Ethernet & Dialup
with Trans-GenAgent SCADA software

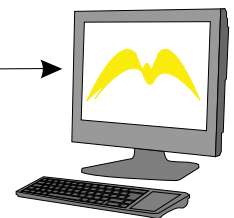
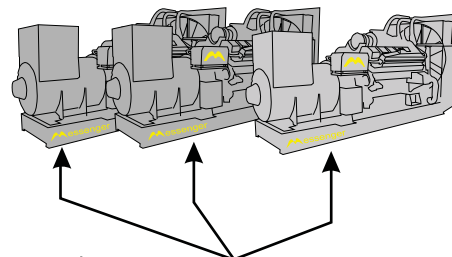


**Trans Series
GPRS
Communication Module**



**Remote
Control & Visualisation
for Multiple Gen-Sets**

- Easy plugging to all Trans Series controllers
- GPRS communication
- Call-Back selection by GPRS
- Maintenance management of multiple Gen-Sets from a central computer
- Alarm observation and archive
- DHCP supported
- ModBus over TCP/IP communication protocol
- 2G, 2G5, 3G, EDGE supported
- Suitable for telecommunication projects



GSM Modem



SMS



Order Information

Trans-Messenger.GP

Remote Control & Visualisation Module
communicate by GPRS with
Trans-GenAgent SCADA software

**Trans Series
RS-485 Serial
Communication Module**

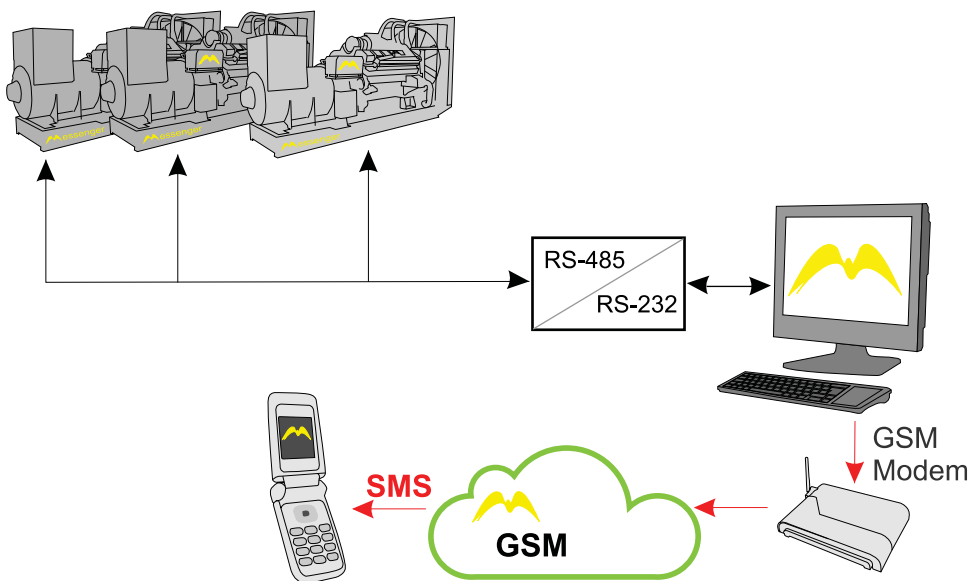
RS-485
Serial



**Remote
Control & Visualisation
for Multiple Gen-Sets**



- Easy plugging to all Trans Series controllers
- RS-485 serial ModBus communication
- Call-Back selection by Serial network
- Maintenance management of multiple Gen-Sets from a central computer
- Alarm observation and archive
- Easy adjustable ID address
- Max. 247 device can be add on serial network
- 500V galvanic insulation



Order Information

Trans-Messenger.485

Remote Control & Visualisation Module,
communication by RS-485 with
Trans-GenAgent SCADA software



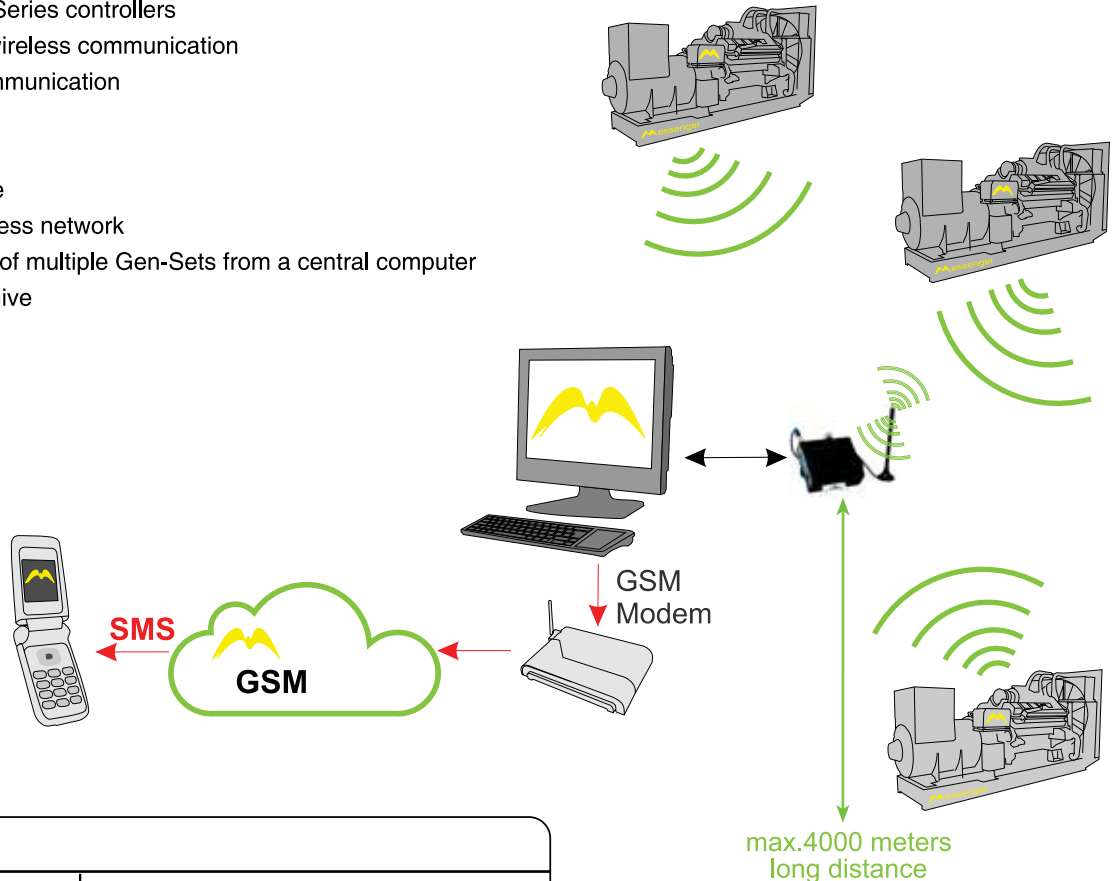
Wireless
Long distance



**Trans Series
Wireless Radio Frequency
Communication Module**

**Remote
Control & Visualisation
for Multiple Gen-Sets**

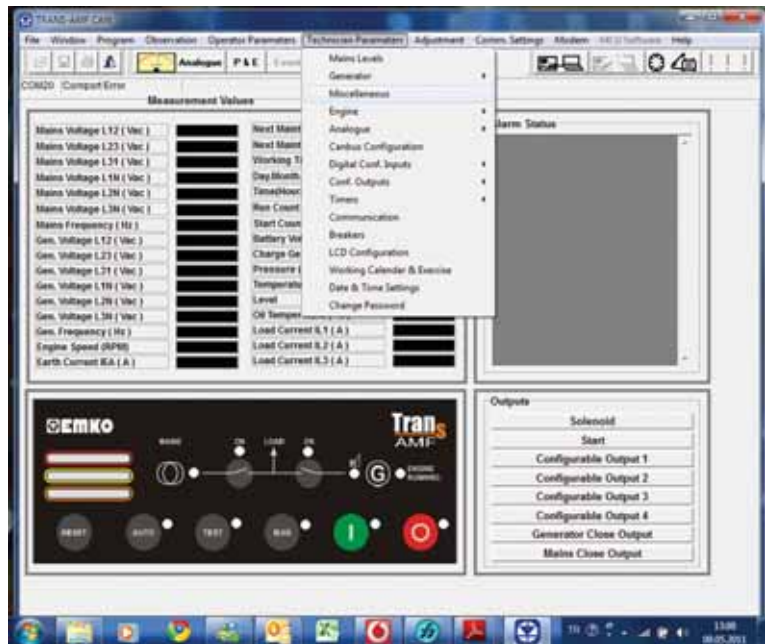
- Easy plugging to all Trans Series controllers
- 4000 meter long distance wireless communication
- 868 MHz ISM band RF communication
- 38,4 kbps baud rate
- 500 mW output power
- Communication licence free
- Call back selection by wireless network
- Maintenance management of multiple Gen-Sets from a central computer
- Alarm observation and archive



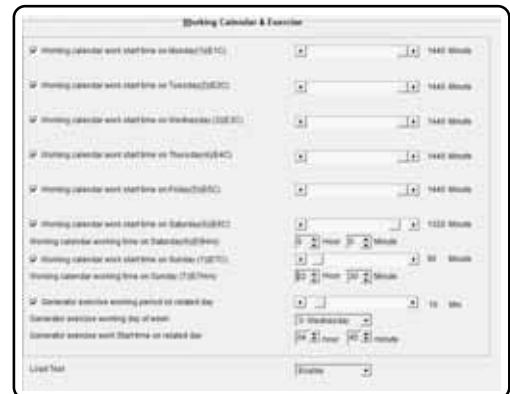
max.4000 meters
long distance

Order Information	
Trans-Messenger.RF	Remote Control & Visualisation Module communicate by 868 MHz RF with Trans-GenAgent SCADA software

Remote Visualisation & Control SCADA Software



- Automatic device recognition for Trans series controllers
- Remote control & visualisation for multiple Gen-Sets
- Communicate by Dial Up, Ethernet, Internet, GPRS, GSM, RF and Serial
- USB communication for single Gen-Set remote control & visualisation
- “Auto Call” for 3 times / daily
- Alarm and event Archive
- Configurable and recordable new language by user
- Authorised access, secure communication
- Windows XP, Vista, 7 compatible

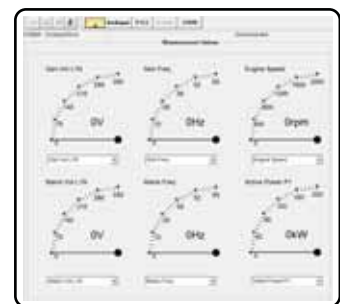
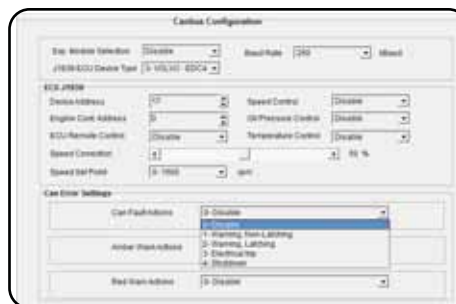


Observation

- Measurement values
- J 1939 ECU values
- Power and Energy values
- Event Logs
- Analogue View
- Archive database
- Outputs status
- Alarm status
- Online device status
- Red or Yellow Alarms
- Maintenance Alarm

Control

- Modes changing
- Engine Start / Stop
- Breakers control
- Operator parameters changing
- Technician parameters changing
- Device measurement values adjusting



Order Information

Trans-GenAgent

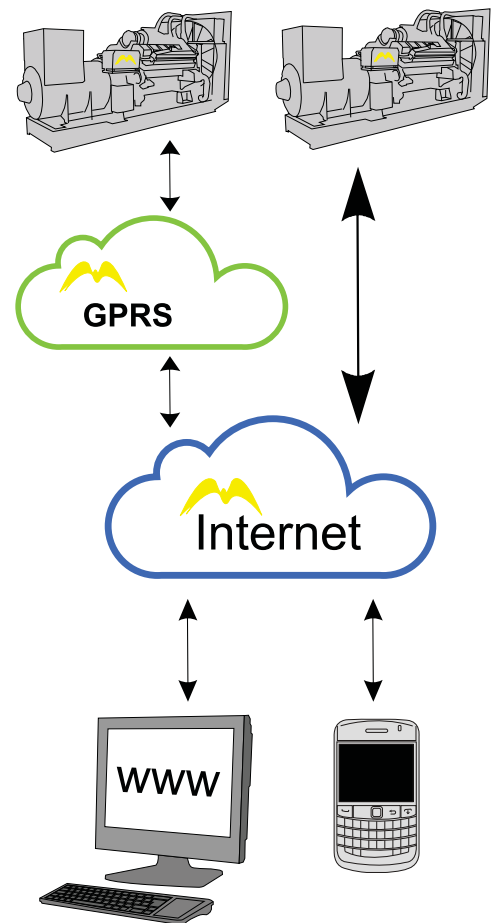
Remote Control & Visualisation
SCADA software



- Easy plugging to all Trans Series controllers
- Ethernet or GPRS communication
- Built-in http web pages
- Compatible to Trans-Cloud remote Gen-Set Management System
- Remote Genset control by Smart phones and PC
- E-mail sending when the alarm situation
- 4Gb SD memory
- User definable data logging period
- Alarm observation and archive
- DHCP supported
- 2G, 2G5, 3G, EDGE supported

Web Server

Trans Series Embedded Web Server Communication Module



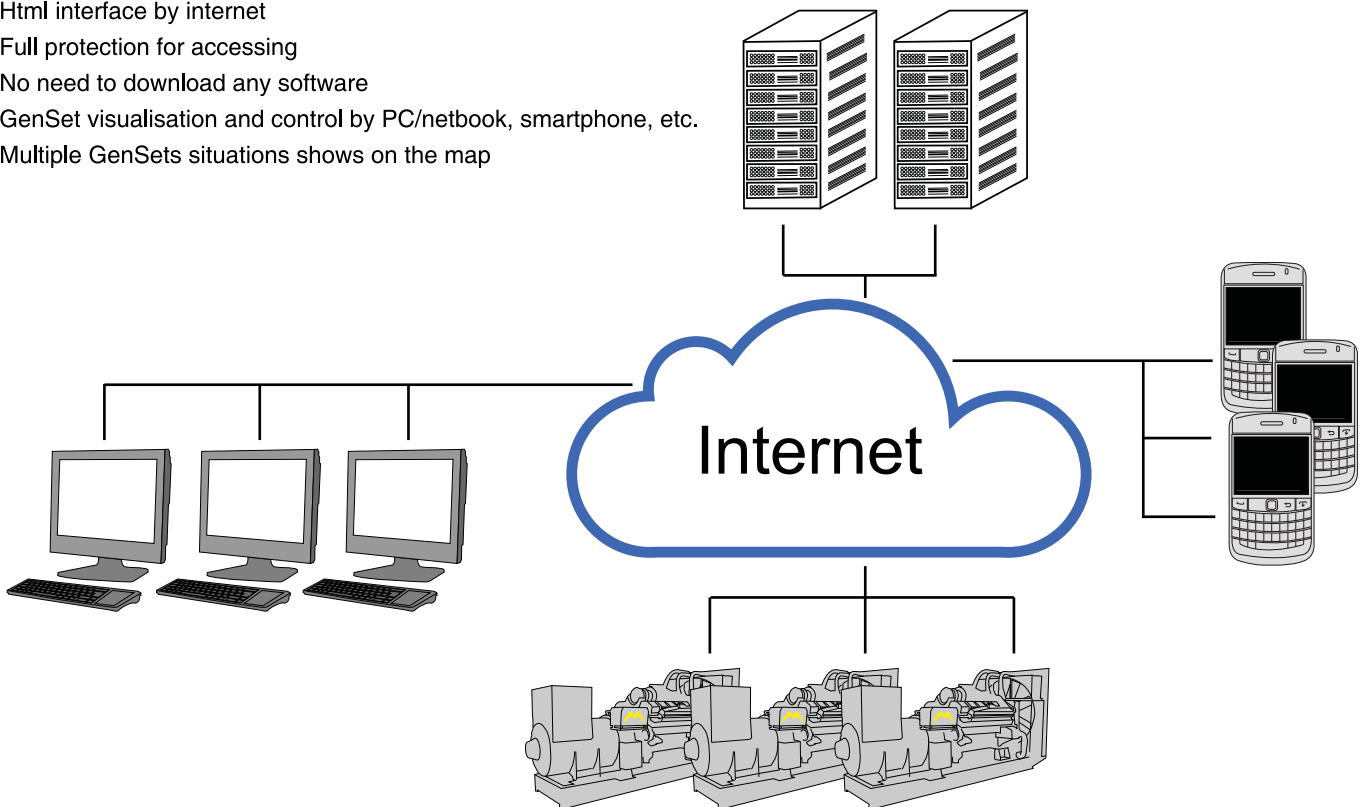
Order Information	
Trans-Web	Remote Control & Visualisation Module communicate by Internet through Ethernet
Trans-Web.GP	Remote Control & Visualisation Module communicate by Internet through GPRS

**Remote GenSet
Management System**

Cloud
Network



- Easy remote access to GenSet all over the world
- Unlimited users for remote access to GenSet
- Server - client based solution
- Multiple GenSets visualisation
- Measured values and statistic analysis
- Email and SMS notification when the alarm situation
- Html interface by internet
- Full protection for accessing
- No need to download any software
- GenSet visualisation and control by PC/netbook, smartphone, etc.
- Multiple GenSets situations shows on the map



Comparison Table

	Trans-Pump	Trans-Mini.Auto	Trans-Mini.Auto+	Trans-Auto	Trans-Mini.AMF	Trans-AMF	Trans-Mini.ATS	Trans-ATS
Dimensions	111 x 81mm	111 x 81mm	111 x 81mm	229 x 152mm	111 x 81mm	229 x 152mm	111 x 81mm	229 x 152mm
Mains Voltage	N/A	N/A	N/A	N/A	3Ph	3Ph	3Ph	3Ph
Gen Voltage	N/A	1Ph	3Ph	3Ph	1Ph	3Ph	1Ph	3Ph
Load Current	N/A	1Ph	1Ph	3Ph	1Ph	3Ph	-	3Ph
Mag.PickUp	+	/+	/+	+	-	+	-	-
CanBus J-1939	-	/+	/+	+	/+	+	-	-
Configurable Inputs	3	3	3	7	3	7	6	7
Remote Start Input	conf	conf	conf	conf	conf	conf	-	-
Oil Pressure Input	Sender or Alarm	Sender or Alarm	Sender or Alarm	Sender or Alarm	Sender or Alarm	Sender or Alarm	N/A	N/A
Temperature Input	Sender or Alarm	Sender or Alarm	Sender or Alarm	Sender or Alarm	Sender or Alarm	Sender or Alarm	N/A	N/A
Aux. Sender Input	1	1	1	2	1	2	-	-
Charg.Alt.Input	+	+	+	+	+	+	N/A	N/A
Configure Outputs	2	3	3	4	4	4	5	4
Crank output	1	1	1	1	1	1	N/A	N/A
Solenoid output	1	1	1	1	1	1	N/A	N/A
MCB out	N/A	N/A	N/A	N/A	+	+	+	+
GCB out	N/A	conf	+	+	+	+	+	+
Communication	RS-232	RS-232	RS-232	USB	RS-232	USB	RS-232	USB
I/O Expansion Module	-	-	-	/+	-	/+	-	/+
Remote monitoring Modules	N/A	N/A	N/A	GSM Ethernet Dial-Up GPRS RF RS-485 Web server	N/A	GSM Ethernet Dial-Up GPRS RF RS-485 Web server	N/A	GSM Ethernet Dial-Up GPRS RF RS-485 Web server

**Auto Start Moto-Pump
Protection & Controllers**



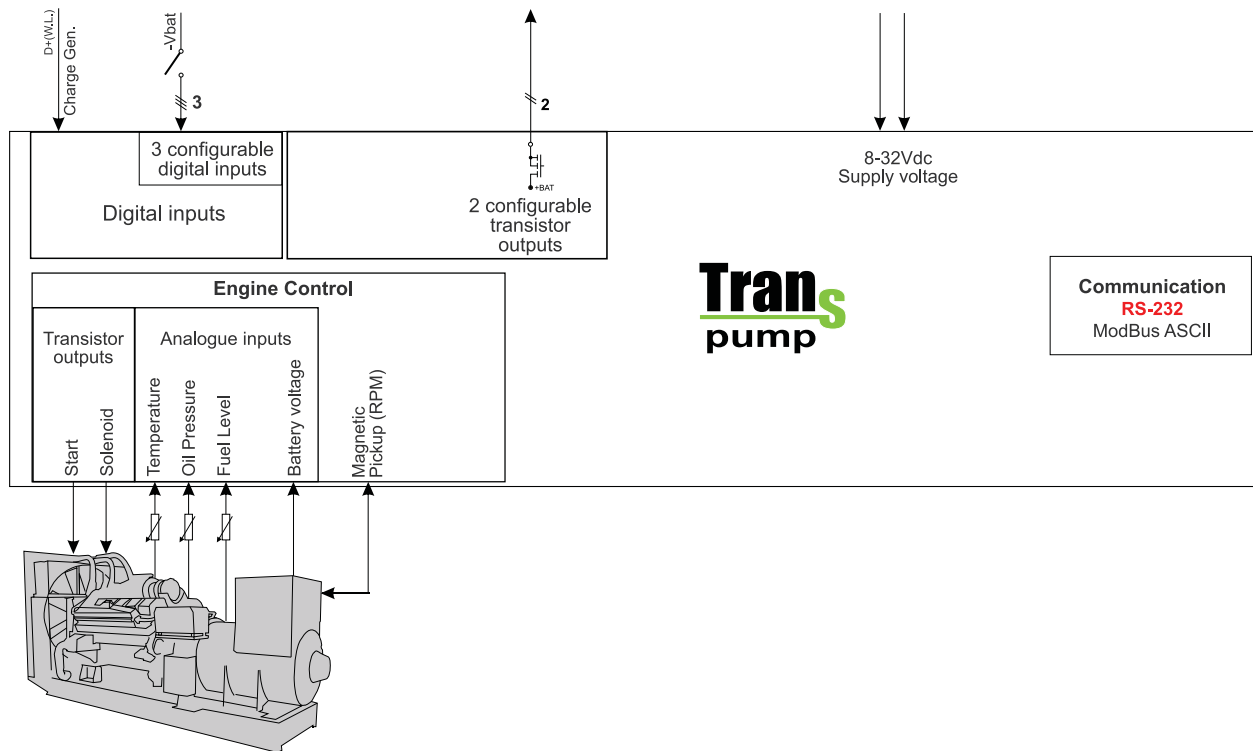
- Parameter configuration via RS-232 serial communication
- Log last 50 events & alarm information with measured values
- Statistics records
- 3 resistive sender inputs for Temperature, Oil Pressure and Fuel Level
- Selectable Resistive sender types; Pt-100, VDO, US, GM, Ford, Datcon, etc..
- Speed sensing from magnetic pickup
- Configurable 3 inputs and 2 outputs
- Stop or Fuel solenoid selection
- Engine control
- Compatible to Diesel or Gas engines
- Remote Start

Pre-Alarm
 Engine temperature
 Oil pressure
 Over / Under speed

Controls
 Fuel and Stop solenoid
 Starter motor
 Remote Start / Stop
 Preheat
 External alarm horn

Fail Monitoring
 Emergency stop
 Multiple engage fail
 Failed to start
 Low oil pressure
 High temperature
 Speed failure
 Charging fail
 Shutdown
 Warning

Error
 Over / Under speed
 Speed loss
 Battery low
 Battery high
 Maintenance
 Engine stop
 Charge alternator



- Dimensions : 111mm x 81mm x 61mm
- Panel Cut-Out : 81mm x 70mm
- Protection : IP65 at front panel
- Weight : Approximately 0,3Kg
- Operating temperature : -20°C to +70°C
- DC battery supply voltage : 8 to 32Vdc, max. operating current is 360mA
- Sender Measurement : 0 to 1300 ohm, accuracy: 1%FS, resolution: 1 ohm

Order Information

Trans-Pump

Diesel and Gas engine Auto Start controller for pump applications

**Automatic Gen-Set
Controllers**



- CanBus J1939 ECU communication
- Parameter configuration via RS-232 serial communication
- Log last 50 events & alarm information with measured values
- Statistics records
- Remote Start/Stop, Speed and Idle mode control via J1939
- Power factor measurement for 1 phase
- 3 resistive sender inputs for Temperature, Oil Pressure and Fuel Level
- Selectable Resistive sender types; Pt-100, VDO, US, GM, Ford, Datcon, etc..
- Speed sensing from alternator voltage, magnetic pickup or CanBus J1939
- 1 phase alternator voltage measurement
- 1 phase Load current measurement
- Configurable 3 inputs and 3 outputs
- ECU power, ECU stop, Stop or Fuel solenoid selection
- Engine control
- Compatible to Diesel or Gas generators
- Power measurement
- Adjustable Start, Load and Stop timers
- SPN, FMI and OC values reading from engines via J1939

Pre-Alarm

- Engine temperature
- Oil pressure
- Over / Under voltage
- Over / Under frequency
- Over / Under speed

Fail Monitoring

- Emergency stop
- Multiple engage fail
- Failed to start
- Low oil pressure
- High temperature
- Speed failure
- Voltage
- Charging fail
- Shutdown
- Warning

Warning & Electrical trip

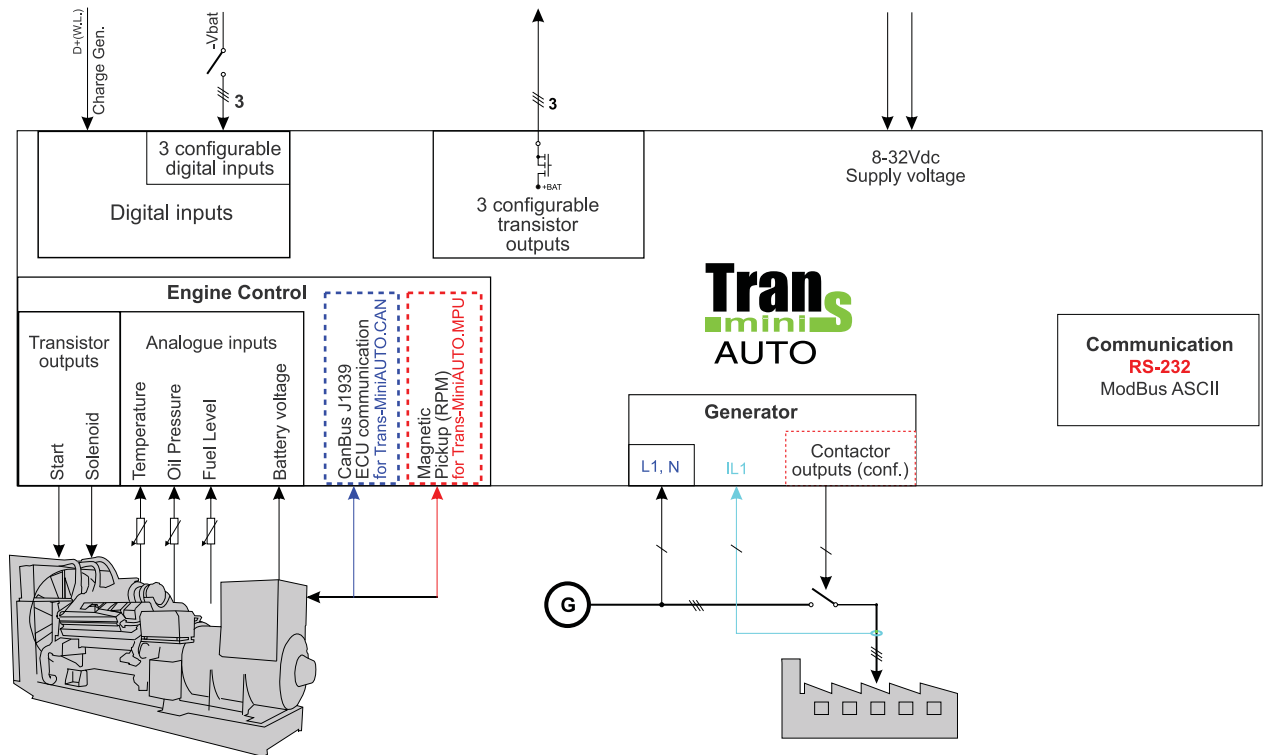
- Over current
- Short circuit

Controls

- Fuel and Stop solenoid
- ECU power and stop
- Starter motor
- Automatic generator start
- Preheat
- External alarm horn
- Engine cooling
- Idle mode

Error

- Over / Under speed
- Speed loss
- Battery low
- Battery high
- Maintenance
- Over current
- Short circuit
- Engine stop
- CanBus
- Charge alternator



- Dimensions : 111mm x 81mm x 61mm
- Panel Cut-Out : 81mm x 70mm
- Protection : IP65 at front panel
- Weight : Approximately 0,3Kg
- Operating temperature : -20°C to +70°C
- DC battery supply voltage : 8 to 32Vdc, max. operating current is 360mA
- CT secondary : 5A
- Sender Measurement : 0 to 1300 ohm, accuracy: 1%FS, resolution: 1 ohm

Order Information	
Trans-MiniAUTO	Auto Start GenSet controller, LCD display
Trans-MiniAUTO.CAN	Auto Start GenSet controller, CanBus J1939 ECU communication
Trans-MiniAUTO.MPU	Auto Start GenSet controller, speed sensing from Magnetic Pickup

Automatic Transfer Switching Controllers



CanBus J1939 ECU communication
 Parameter configuration via RS-232 serial communication
 Log last 50 events & alarm information with measured values
 Statistics records
 Remote Start/Stop, Speed and Idle mode control via J1939
 Power factor measurement for 1 phase
 3 resistive sender inputs for Temperature, Oil Pressure and Fuel Level
 Selectable Resistive sender types; Pt-100, VDO, US, GM, Ford, Datcon, etc..
 Speed sensing from alternator voltage, magnetic pickup or CanBus J1939
 3 phase alternator voltage measurement
 1 phase Load current measurement
 Configurable 3 inputs and 3 outputs
 ECU power, ECU stop, Stop or Fuel solenoid selection
 Engine control
 Compatible to Diesel or Gas generators
 Power measurement
 Adjustable Start, Load and Stop timers
 SPN, FMI and OC values reading from engines via J1939

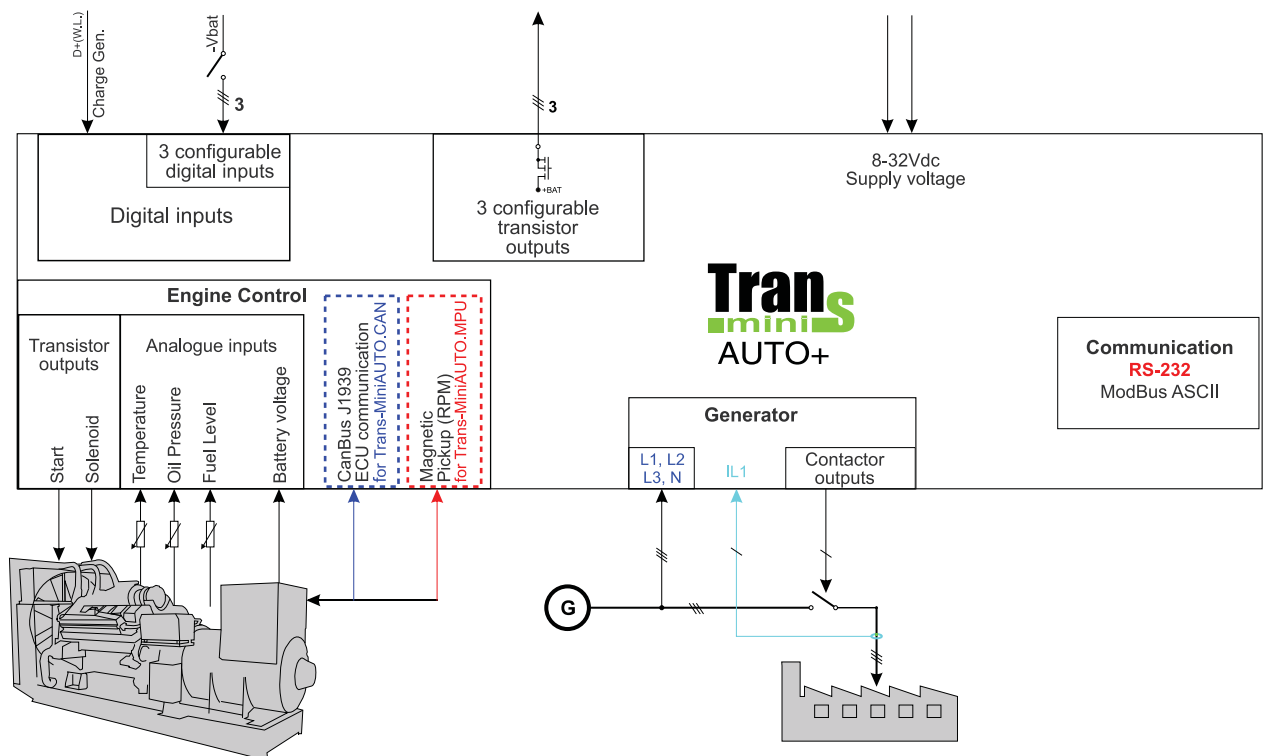
Pre-Alarm
 Engine temperature
 Oil pressure
 Over / Under voltage
 Over / Under frequency
 Over / Under speed

Warning & Electrical trip
 Over current
 Short circuit

Controls
 Fuel and Stop solenoid
 ECU power and stop
 Starter motor
 Automatic generator start
 Preheat
 External alarm horn
 Engine cooling
 Idle mode

Fail Monitoring
 Emergency stop
 Multiple engage fail
 Failed to start
 Low oil pressure
 High temperature
 Speed failure
 Voltage
 Charging fail
 Shutdown
 Warning

Error
 Over / Under speed
 Speed loss
 Battery low
 Battery high
 Maintenance
 Over current
 Short circuit
 Engine stop
 CanBus
 Charge alternator



- Dimensions : 111mm x 81mm x 61mm
- Panel Cut-Out : 81mm x 70mm
- Protection : IP65 at front panel
- Weight : Approximately 0,3Kg
- Operating temperature : -20°C to +70°C
- DC battery supply voltage : 8 to 32Vdc, max. operating current is 360mA
- CT secondary : 5A
- Sender Measurement : 0 to 1300 ohm, accuracy: 1%FS, resolution: 1 ohm

Order Information	
Trans-MiniAUTO+	Auto Start GenSet controller, LCD display
Trans-MiniAUTO+.CAN	Auto Start GenSet controller, CanBus J1939 ECU communication
Trans-MiniAUTO+.MPU	Auto Start GenSet controller, speed sensing from Magnetic Pickup

Automatic Gen-Set Controllers with Transfer Switching



CanBus J1939 ECU communication
 Parameter configuration via RS-232 serial communication
 Log last 50 events & alarm information with measured values
 Statistics records
 Remote Start/Stop, Speed and Idle mode control via J1939
 Power factor measurement for 1 phases
 3 resistive sender inputs for Temperature, Oil Pressure and Fuel Level
 Selectable Resistive sender types; Pt-100, VDO, US, GM, Ford, Datcon, etc..
 Speed sensing from alternator voltage or magnetic pickup
 1 phase Load current measurement
 3 phase mains and 1 phase alternator voltage measurement
 Configurable 3 inputs and 4 outputs
 ECU power, ECU stop, Stop or Fuel solenoid selection
 Programmable weekly working permit calendar
 Exercise at programmed time intervals
 Automatic transfer switching control and engine control
 Compatible to Diesel or Gas generators
 Active, Reactive, Apparent power measurement
 Adjustable Start, Load and Stop timers
 SPN, FMI and OC values reading from engines via J1939

Pre-Alarm

Engine temperature
 Oil pressure
 Over / Under voltage
 Over / Under frequency
 Over / Under speed

Fail Monitoring

Emergency stop
 Multiple engage fail
 Failed to start
 Low oil pressure
 High temperature
 Speed failure
 Voltage
 Charging fail
 Shutdown
 Warning

Warning & Electrical trip

Over current
 Short circuit

Alarm

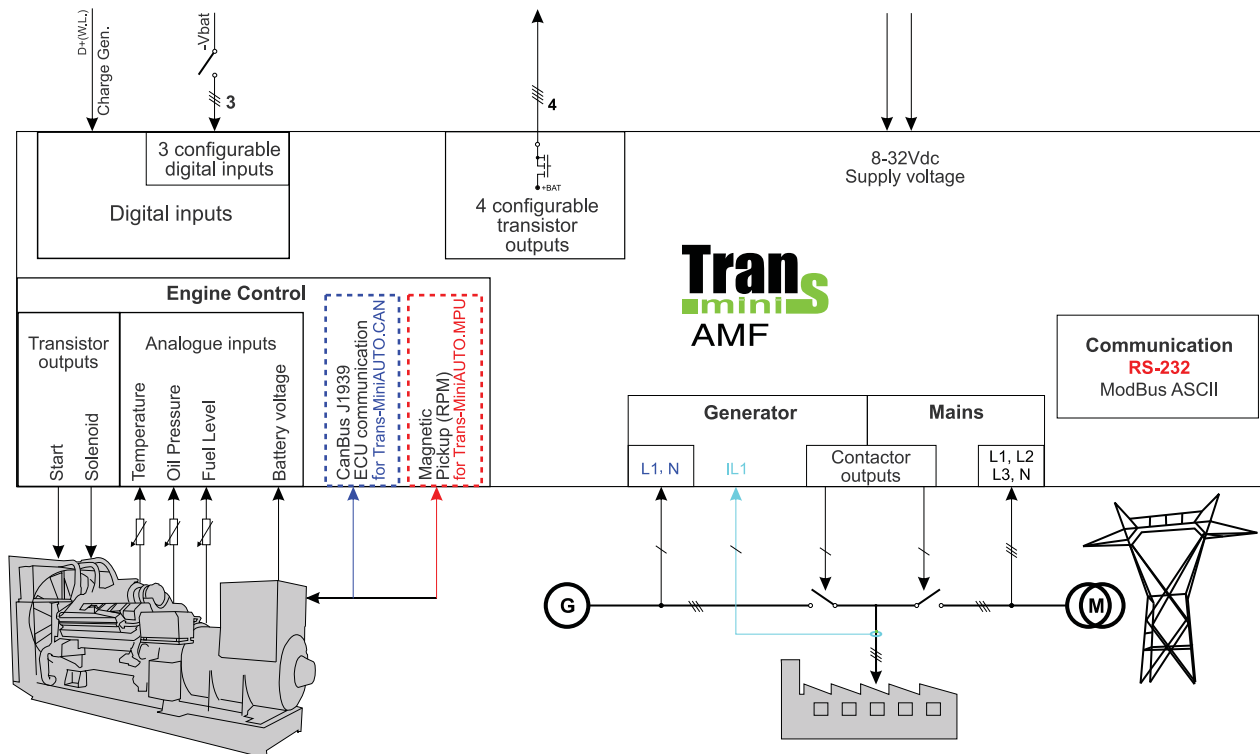
Mains breaker not opened
 Mains breaker not closed
 Generator breaker not opened
 Generator breaker not closed

Error

Over / Under speed
 Speed loss
 Battery low
 Battery high
 Maintenance
 Over current
 Short circuit
 Engine stop
 CanBus
 Charge alternator

Controls

Fuel and Stop solenoid
 ECU power and stop
 Starter motor
 Automatic generator start
 Load transfer to mains
 Preheat
 External alarm horn
 Engine cooling
 Idle mode



- Dimensions : 111mm x 81mm x 61mm
- Panel Cut-Out : 81mm x 70mm
- Protection : IP65 at front panel
- Weight : Approximately 0,3Kg
- Operating temperature : -20 C to +70 C
- DC battery supply voltage : 8 to 32Vdc, max. operating current is 360mA
- CT secondary : 5A
- Sender Measurement : 0 to 1300 ohm, accuracy: 1%FS, resolution: 1 ohm

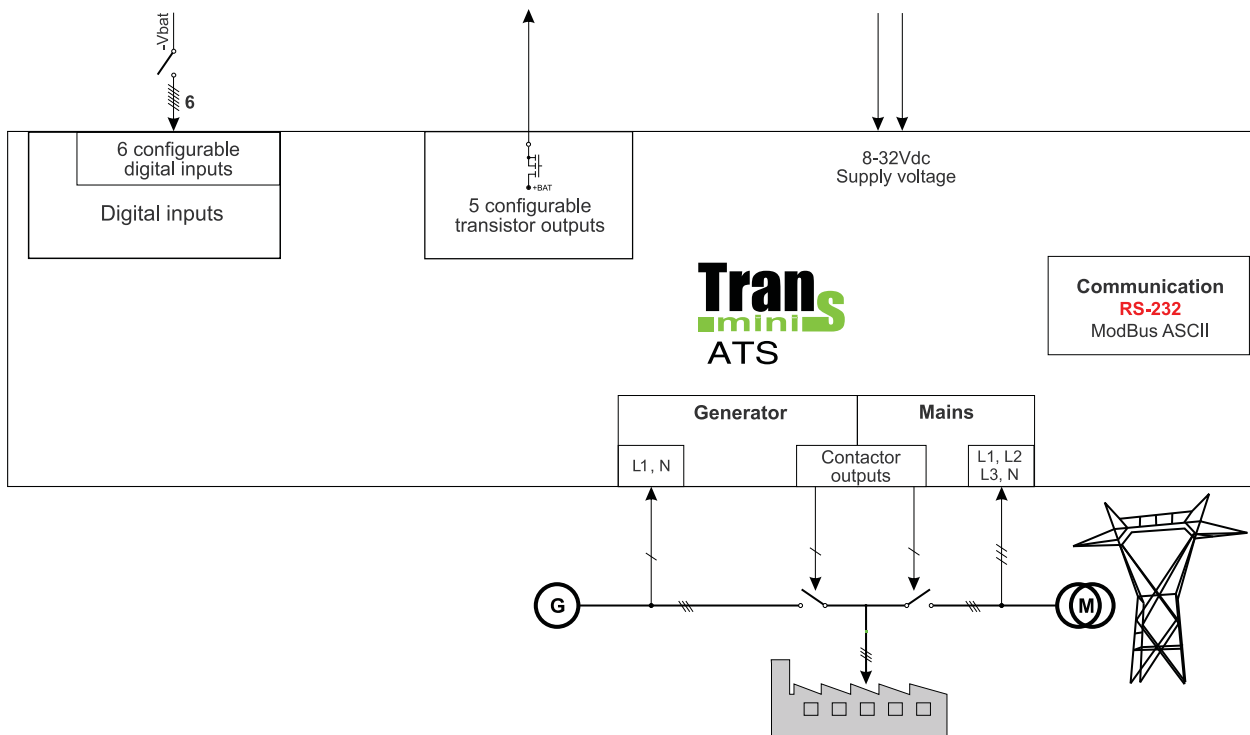
Order Information

Trans-MiniAMF	Automatic GenSet controller with transfer switching
Trans-MiniAMF.CAN	Automatic GenSet controller with transfer switching, CanBus J1939 ECU comm.
Trans-MiniAMF.MPU	Automatic GenSet controller with transfer switching, speed sensing from Magnetic Pickup

Automatic Transfer Switching Controllers



- Parameter configuration via RS-232 serial communication
- Log last 50 events & alarm information with measured values
- Statistics records
- Remote Start/Stop output
- Configurable 5 outputs and 6 digital inputs
- 3 phase mains and 1 phase alternator voltage measurement
- Configurable Load Generator and Engine running inputs
- Mains voltage failure detection
- Emergency backup and Test mode



- Dimensions : 111mm x 81mm x 61mm
- Panel Cut-Out : 81mm x 70mm
- Protection : IP65 at front panel
- Weight : Approximately 0,3Kg
- Operating temperature : -20°C to +70°C
- DC battery supply voltage : 8 to 32Vdc, max. operating current is 360mA

Order Information

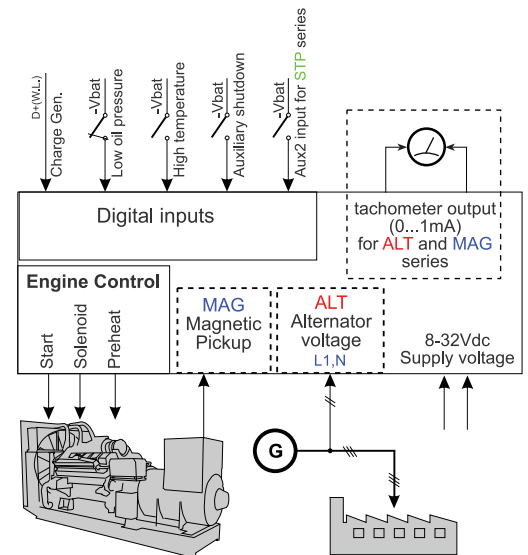
Trans-MiniATS

Automatic transfer switching controller, LCD display



Manual Key Start & Engine Protection with Key Switch

- Automatic shutdown on fault condition,
- Alarm and status information,
- Auxiliary shutdown input,
- Provides charge alternator excitation current,
- Over speed protection option with tachometer metering output,
- Optional tamper-proof elapsed time meter,
- Optional stop button,
- 72x72mm size



Controls

- Fuel and Stop solenoid
- Starter motor
- Manual generator start/stop
- Preheat

Fail Monitoring

- Low oil pressure
- High temperature
- Over speed failure
- Charging fail

Monitors

- Engine running time
- Error indication

	Product codes	EAOM-3	EAOM-3-ALT	EAOM-3-MAG	EAOM-3-HM	EAOM-3-HM-ALT	EAOM-3-HM-MAG	EAOM-3-STP	EAOM-3-STP-ALT	EAOM-3-STP-MAG	EAOM-3-HM-STP	EAOM-3-HM-STP-ALT	EAOM-3-HM-STP-MAG
Order information													
Overspeed sensing from generator voltage			+			+			+			+	
Overspeed sensing from magnetic pickup				+			+			+			+
Time meter					+	+	+				+	+	+
Stop button								+	+	+	+	+	+
Stop/Fuel selection								+	+	+	+	+	+
Preheat		+	+	+	+	+	+	+	+	+	+	+	+
Aux.In-1		+	+	+	+	+	+	+	+	+	+	+	+
Aux.In-2								+	+	+	+	+	+

Battery Charger



for long battery life

- 3A or 5A output for 12Vdc and 24Vdc battery
- 100...240Vac wide range supply voltage
- Short circuit and over current protection
- Reverse connection protection
- Boost output for quick charging
- Easy replacable fuse
- Durability for voltage fluctuation
- Flame resistance plastic box

Order information	
GENCHARGER-312S	SMPS Battery Charger, 3A Output for 12Vdc battery, 100-240Vac supply voltage
GENCHARGER-512S	SMPS Battery Charger, 5A Output for 12Vdc battery, 100-240Vac supply voltage
GENCHARGER-324S	SMPS Battery Charger, 3A Output for 24Vdc battery, 100-240Vac supply voltage
GENCHARGER-524S	SMPS Battery Charger, 5A Output for 24Vdc battery, 100-240Vac supply voltage

Company Profile



EMKO ELEKTRONIK A.S. has been engaged in the design, manufacture and marketing of Measurement and Control Instruments, Temperature Sensors and Generator Set Controllers , as well as in providing the relevant before and after sales technical service. Giving the utmost importance to the customer-oriented approach and to product functionality and quality, we have carried out the design and manufacture of programmable multi-function process-control instruments, counters, time-relays, thermocouples and thermoresistances, control and protection generating systems; gen-set controls, automatic transfer switching, manual-keystarts.

Our product range and services meet the needs of the textile, food, plastic, glass, automotive, chemicals, iron and steel, cement, machinery production, energy and other sectors, with regard to the automation and process-control materials and services that they require. Thanks to the quality policy and procedures issued by the management of our company, which possesses the TS ISO EN 9001 Quality System Certificate, complete customer satisfaction in the areas of design, production and service is guaranteed. The design and manufacture of control devices conformed to the directives covered by the CE brand by performing the EMI, ESD, EFT, PQF, Surge, LVD, Environmental Conditions tests on new product designs in the test laboratories on our factory premises.

The following design issues are experimented with in our company:

- Process measurement and control instruments which conform to the industrial standards.
- The measurement, conversion and control of process parameters: temperature, pressure, weight, flow, level, speed, humidity, number, time, voltage and current etc.
- Temperature sensors, thermocouples and thermoresistances
- Control and protection generating systems; Gen-Set controls, Automatic Transfer Switchings, Manual-keystarts

Our "Customer Support Service" provides pleasant, cheerful and a sincere approach to ensure that our customers select the most suitable products by providing satisfactory and correct technical information before the sale and if the orders are delivered correctly and on time by keeping track of orders within the company. Also, guarantees customer satisfaction at all times, in all places and under all circumstances by supplying them with speedy and reliable information through our authorized dealer and service network.



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