

# GUARD R3VOLUTION 4.0

## by ComAp



## ONIS VISA® GUARD REVOLUTION 4.0

Guard Revolution 4.0 control panel, developed in cooperation with Comap, allow the complete control and management of the Onis Visa genset.

- The simple and intuitive interface helps the user to better manage events and performances.
- The user can monitor the generator and interact through the control unit via APP or WEB page via internet.
- Stand-by (AMF) and prime-power (MRS) application in one unit.
- All-in-one intuitive & powerful PC tool for configuration/monitoring/control, locally or remotely
- Easy to configure and use

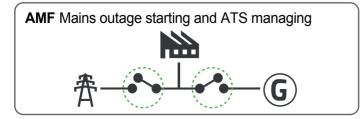
#### **KEY FEATURES**

- Stand-by (AMF) and prime-power (MRS) application in one unit.
- 3.2" Backlit LCD
- 8 binary outputs, 8 + 1 binary inputs, 4 analog inputs (U/I/R) +5 V output reference for analog inputs
- 2 high-current E-Stop binary outputs USB Host
- Inbuild RS485
- 2 slots for extension plug-in modules (Modbus, Internet, SMS, inputs/outputs)
- Extension CAN modules
- ECU support (Tier 4 Final, Stage V)
- RTC with battery back-up (full calendar)
- · Power over USB for controller configuration
- Zero power mode
- · True RMS measurement
- In-built PLC, complemented with a PLC monitoring tool (InteliConfig)
- Full remote communications support (AirGate 2.0, WSV)
- Internet access using Ethernet / 4G, Modbus TCP/RTU, SNMP v1/v2c
- · Active SMS and emails
- Detailed history log with up to 350 records
- Dual Mutual Standby application support
- · Remote display
- User setpoints and protections
- 5 languages in the controller & Translator functionality
- · User Access Management
- · Cyber security improvement
- · Alternative configurations
- · Multi-purpose schedulers
- Modbus register mapping possibility
- · Load shedding, dummy load management User buttons
- · Cloud-based monitoring and control via Onis Visa WebSupervisor

## PANORAMICA APPLICAZIONI

#### SINGLE MODULE (AMF + MRS)

Changing from AMF to MRS by changing the setpoint "OPERATION MODE" (on the same unit):









**CURRENT MEASUREMENT** 

Operating temperature

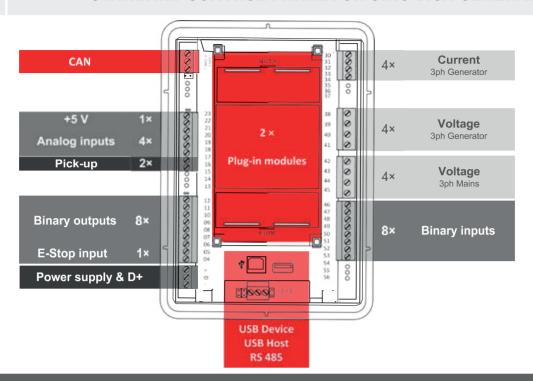
**CURRENT MEASUREMENT** 

Measurement inputs Measurement range

Max. allowed current

Operating humidity

Protection degree (front panel)



## Technical data

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Resolution

**USB** Device

**USB Host** 

RS485

CAN 1

**COMMUNICATIONS** 

POWER SUPPLY	
Power supply range	8-36 VDC
Power consumption	3.5 W
(without modules)	
RTC battery	Replaceable (3 V)
Fusing power	4 A
	w/o BOUT consumption
E-Stop fusing	10 A
	0.147
Max. Power Dissipation	9 W
Max. corrente di uscita	250 mA
VOLTAGE MEASUREMENT	
Measurement inputs	3ph-n Gen voltage
	3ph-n Mains
Measurement range	10-277 V AC / 10-480 V AC (EU)
	10-346 V AC / 10-600 V AC(US)
Accuracy	1%
DISPLAY	
Туре	Build-in monochromatic 3.2"

132 × 64 px

connector

connector

Isolated

Non-isolated type B

Non-isolated type A

Non-isolated, 250/50 kbps,

Terminator imped. 120  $\Omega$ 

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E-STOP

Accuracy

Dedicated terminal for safe E-Stop input. Physical supply for binary outputs 1 & 2.

## **BINARY INPUTS**

Input impedance

Number	8
Close	0-2 VDC close contact
Open indication	6-36VDC open contact

**IP 65** 

5 A 10 A

<0.1Ω

Surrounding air temperature rating 70 °C - Suitable for pollution degree 2

-20 °C to +70 °C

(EN 60068-2-30)

95 % non-condensing

3F corrente generatore

±20 mA for 0-2 A; 1% of

value for 2-5 A

#### **BINARY OUTPUTS**

number	0
Max. current	BO1,2 = 5 A; BO3-8 = 0.5 A
Switching to	positive supply terminal

#### ANALOG INDLITE

ANALOG INFOTS	
Number	4, switchable (R/U/I)
Range	$R = 0-2500 \Omega$ ; $U = 0-10 V$ ; $I = 0-20 mA$
Accuracy	R: $\pm 2$ % from value $\pm 5$ $\Omega$ in range 0-250 $\Omega$
	R: ±4 % from value in range 250 $\Omega$ -2500 $\Omega$
	U: 1 % from value ±100 mV
	I: 1 % from value ±0.2 mA



# **UPGRADE YOUR GUARD REVOLUTION WITH THE PLUG AND PLAY OPTIONS**

A plug and play Solution for the additional extension modules to meet all customer needs.









PRESS THE FINS TO OPEN THE LID

**INSERT THE PLUG&PLAY EXPANSION MODULE** INTO ONE OF THE TWO SLOTS

**CHANGE THE LID COVER** AND CONNECT!

# **AVAILABLE PLUG-IN MODULES (2 slots for plug-in modules)**

Product	Description	Order code
CM2-4G-GPS	4G, SMS, Email e GPS communication module	108030138
CM3-Ethernet	Ethernet, Email, Modbus, SNMP communication module	108030130
EM-BIO8-EFCP	8 additional binary inputs/outputs	108030085

## **AVAILABLE CAN MODULES**

Product	Description	Order code
IGL-RA15	CAN remote annunciator with 15 LEDs	108030103
Inteli AIN8	CAN module with 8 analog inputs	108030070
Inteli IO8/8	CAN module with 8 binary inputs and 8 binary outputs	108030065
IGS-PTM	CAN mod. 8 binary in, 8 binary out, 4 analog in and 1 analog out	108030040
Inteli AIN8TC	CAN mod. with 8 analog inputs for thermocouple sensors only.	108030071

#### **FUNCTIONS AND PROTECTIONS**

Description	ANSI code	Descrizione	ANSI code
Master unit	1	Voltage unbalance / Negative sequence Volt	47
Stopping device	5	Incomplete sequence relay	48
Multi-function device	11	Overcurrent	50/50TD
Overspeed	12	Earth fault**	50G
Underspeed	14	Breaker failure	50BF
Starting-to-running transition contactor	19	Overcurrent IDMT	51
Thermal relay	26	Overvoltage	59
Undervoltage	27	Aux Over Voltage	59X
Aux Battery Under Voltage	27X	Pressure switch	63
Annunciator	30	Liquid level switch	71
Overload (real power)	32P	Alarm relay***	74
Reverse power	32R	Reclosing relay	79
Master sequence device	34	Overfrequency	810
Unit sequence starting*	44	Underfrequency	81U
Current unbalance	46	Auto selective control/transfer	83



EN 61010-1 EN 60068-2-1 (-20 °C/16 h for std, -40 °C/16 h for LT version) EN 60068-2-2 (70 °C/16 h)

EN 60068-2-6 (2÷25 Hz / ±1.6 mm; 25÷100 Hz / 4.0 g)

EN 60068-2-27 (a=500 m/s; T=6 ms)

EN 60068-2-30:2005 25/55°C, RH 95%, 48h

EN 60529 (front panel IP65, back side IP20)

EN 60068-2-2 (70 °C/16 h)





## **MONITORAGGIO DA REMOTO**

# Onis Visa WebSupervisor



Onis Visa WebSupervisor is cloud-based system designed for monitoring and controlling ComAp controllers via the internet.

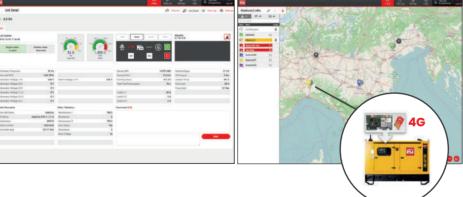
This system offers a number of beneficial features that help optimize revenue for machinery fleets, as each piece of equipment can be individually monitored for all important operation values.

Guard Revolution WebSupervisor offers equipment owners a number of powerful reporting tools allowing monthly summaries of availability and optimizes the maintenance scheduling and asset utilization from the individual equipment to the whole fleet. The information generated from each controller can be archived on the central server for future analysis and trend evaluation.

#### **Remote control**

# **Geolocation and Tracking**

# Monitoring, analysis, activity logging trend





ONIS VISA WEBSUPERVISOR IT IS A WEB PLATFORM DEDICATED TO THE MONITORING AND CONTROL OF THE GENERATING SETS.

IT ALLOWS THE MONITORING THROUGH DIFFERENT SUPPORTS: PC, NOTE BOOK, TABLET and TELEPHONE. INTUITIVE LAYOUT AND "CUSTOMER-FRIENDLY" LANGUAGE. EMAIL NOTIFICATIONS and/or via APP

Available via website: **visa.websupervisor.net**or via APP Store/Play Store by searching: **Websupervisor** 













