

EURA-TITAN

SIMPLE TELECONTROL FOR INVERTERS
WITH INTEGRATED *PumpSoft*



QUICK USER'S GUIDE

STAND-ALONE SYSTEM FOR REMOTE CONTROL OF
VARIABLE SPEED DRIVES
BY MEANS OF SMS MESSAGES VIA GSM SIM

Version 1.0a_EN

IMPORTANT INFORMATION :

EURA-TITAN is a solution aimed at simple remote control of an **EURA DRIVES** variable frequency drive (**VFD**), allowing simple tasks to be carried out in a remote irrigation system by means of short mobile phone messages (**SMS**).

It will therefore be possible, through **SMS** commands (using the **gsm/gprs (2G/3G/4G)** network) to perform the following actions:

- Assignment of **up to 6 mobile phone numbers**, for the management operators of the various options allowed.
- (Only the telephone assigned as the first operator can change the telephone numbers of the operators).
- Configure the operation of the various notifications and operation of the programme.
- (Only the telephone assigned as the first operator can manage **EURA-TITAN**).
- Remote activation and deactivation of irrigation controlled by the **VFD**.
- Assignment of the main setpoint (SetPoint = **SP**), and the 3 auxiliary setpoints (if these are used).
- Query the status of the irrigation system.
- Reset an alarm, allowing the **VFD** to resume operation without anomalies.
- Activate the relay output to start the generator.
- ... If you have any additional requirements, please contact us.

This document contains technical information concerning the use of the product, please read it carefully before starting the installation of the device.

We reserve the right to make any changes or modifications to this document without prior notice.



Only touch the external connectors of the unit and avoid touching any internal components of the device board.

Safety instructions.



Observe the regulations in force when using live equipment.

Make sure that the device is disconnected from the power supply or that the power supply is not connected to the mains before handling the device.

You should only handle the unit by making sure that the power supply is disconnected from the mains and the module. You should also allow a short period of time for the internal components that can store electrical charge to fully discharge.

Regularly check the condition of the cables connected to the device to ensure that they are not damaged, especially the insulation.

If you notice any cables whose insulation is in poor condition, replace them immediately.

Before putting the unit into operation, you must know the correct wiring of all the elements that make up the solution. In case of doubt, please consult your dealer or contact us directly.

We cannot be held responsible for any possible damage caused to the device by incorrect connection or any other incident resulting from incorrect connection.

The **GSM** unit can only work with DC voltage values between 7 and 30 volts. Do not expose the device to voltages above 30 Vdc.

Make sure that modem devices are allowed in the area where the unit is located. The use of cellular mobile phone network communications devices may be hazardous if used in the vicinity of electronic devices intended for personal or medical use only.

The unit should **not be used in airports, aeroplanes and hospitals without prior consultation.**

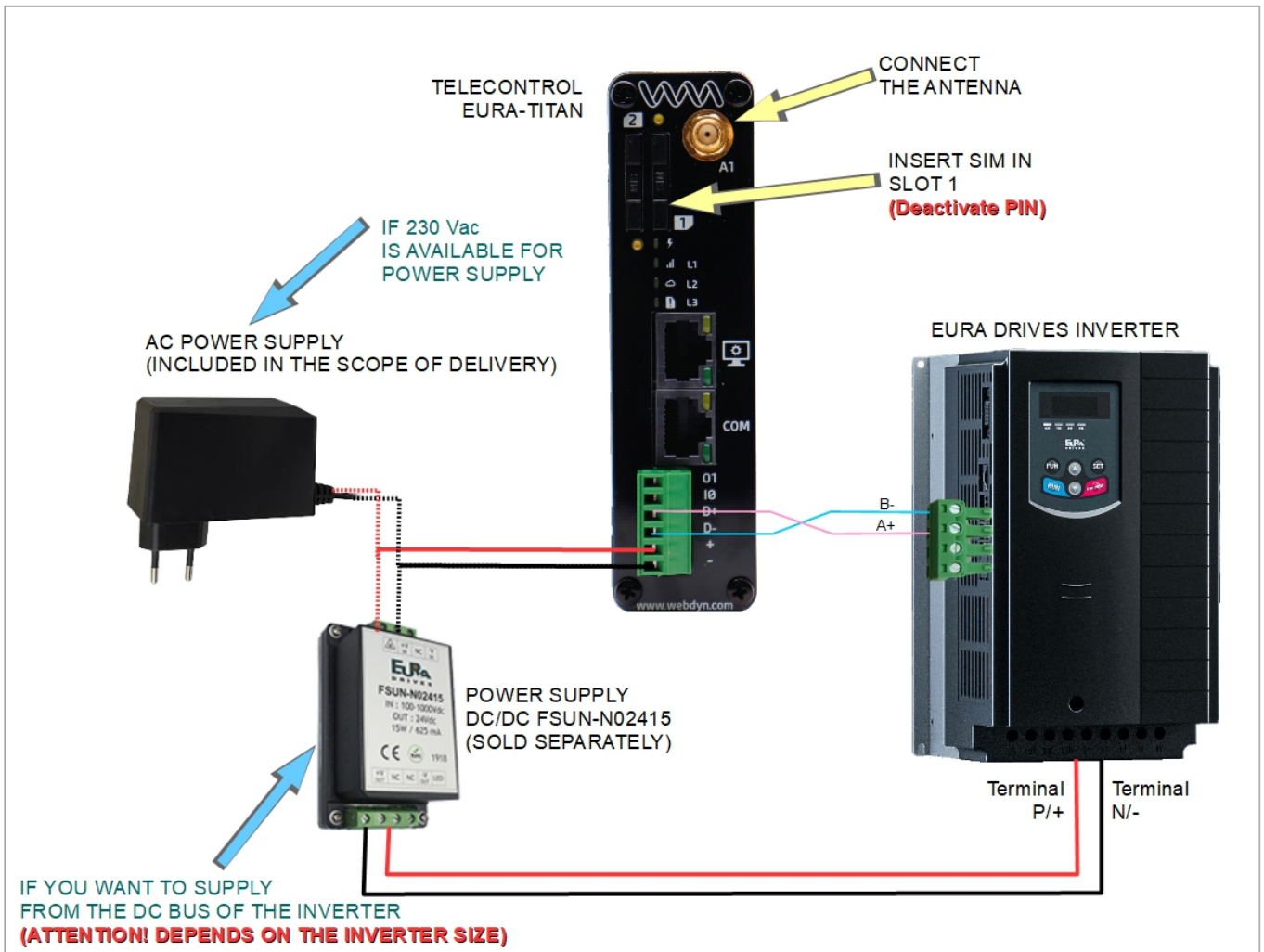
Never use the device in fuel filling stations or any other environment where explosive atmospheres may exist.

Operating the modem in conjunction with other devices such as televisions, antennas or radio stations may cause electromagnetic interference.

Remember to respect a minimum distance of 20 cm between the device and any person who may be within the same environment. In applications where this distance cannot be applied, it is the installer's responsibility to provide the corresponding **SAR** (Specific Absorption Rate) measurement test and report.

It is also the responsibility of the installer to respect the regulations in force within the place of installation of the product.

WIRING TO BE CARRIED OUT :



No cable is included in the scope of delivery of the telecontrol **EURA-TITAN**.











Communications parameters to be set in the VFD EURA DRIVES : F901=2 – F902=2 – F903=0 – F904=6 – F905=0.0 - F907=0.0

MENSAJES DE CONTROL :

THE EURA-TITAN GSM UNIT CAN BE DELIVERED PROGRAMMED AND TESTED, USING THE SIM CARD (SENT BY THE CUSTOMER) AND THE CONNECTION DATA YOU HAVE PROVIDED, OR YOU CAN DO IT POSTERIORLY VIA SMS'S FROM THE SAT.

SUMMARY OF CONTROL MESSAGES :

| Message | Operator | Instruction / Action | Response |
|----------|----------|--|---|
| status | 1 to 6 | Send : status Request for general status of irrigation system | * Depending on the status of the VDF : ▶ Message to sender with drive on RUN ▶ Message to sender with drive on STOP |
| start on | 1to 6 | Send : start or on It puts the irrigation system in operation | ▶ Action confirmation message to sender |
| stop off | 1 to 6 | Send : stop or off Stops irrigation system operation | ▶ Action confirmation message to sender |
| reset | 1 to 6 | Send : reset Resets the inverter alarm | ▶ Action confirmation message to sender |

| Message | Operator | Instruction / Action | Response |
|----------|-------------------------------|--|---|
| reboot | 1 to 6 | Send : reboot Perform GSM reset EURA-TITAN . (Reactivation takes approximately 2 min.) | ▶ Action confirmation message to sender + message informing of delay in reactivation (also to operator 1) |
| f114= | 1 to 6 | Send : f114=ss.d (range 0.1 ~3000.0 seconds) Set the acceleration ramp to the value ss.d | ▶ Action confirmation message to sender |
| f115= | 1 to 6 | Send : f115=ss.d (range 0.1 ~3000.0 seconds) Set the deceleration ramp to the value ss.d | ▶ Action confirmation message to sender |
| viewsp | 1 to 6 | Send : viewsp Request for adjustments of SP, SP2, SP3 y SP4 | ▶ Information message to the sender with the current values ordered |
| sp= | 1 (2 to 6 if author. param4) | Send : sp=nn.d (range 0.0 - FA03) Sets the main setpoint to the value sent in nn.d  The administrator (operator 1) can restrict this action to other operators. | * Depending on the setting value sent : ▶ Confirmation message to sender ▶ Message to sender of error in setting |
| sp2= | 1 (2 to 6 if author. param4) | Send : sp2=nn.d (range 0.0 - FA03) Sets the auxiliar setpoint 2 to the value sent in nn.d  The administrator (operator 1) can restrict this action to other operators. | * Depending on the setting value sent : ▶ Confirmation message to sender ▶ Message to sender of error in setting |
| sp3= | 1 (2 to 6 if author. param4) | Enviar : sp3=nn.d (range 0.0 - FA03) Sets the auxiliar setpoint 3 to the value sent in nn.d  The administrator (operator 1) can restrict this action to other operators. | * Depending on the setting value sent : ▶ Confirmation message to sender ▶ Message to sender of error in setting |
| sp4= | 1 (2 to 6 if author. param4) | Send : sp4=nn.d (range 0.0 - FA03) Sets the auxiliar setpoint 4 to the value sent in nn.d  The administrator (operator 1) can restrict this action to other operators. | * Depending on the setting value sent : ▶ Confirmation message to sender ▶ Message to sender of error in setting |
| smsx= | 1 only | Send : smsx=+34123456789 (where x is a value from 1 to 6) Assigns the telephone number sent to the memory location assigned to operator x .  Only the administrator (operator 1) can assign telephone numbers.  Indicate country identifier for telephone numbers sent. | * Depending on the operator : ▶ Confirmation message to sender  + send reboot message. (If several smsx= messages are sent, send reboot after assigning the last one) ▶ Message to sender of rejection by unauthorised operator |
| group=xx | 1 (2 to 6 if author. param2) | Send : group=xx (xx= ON or OFF) If xx=on = Activates the assigned output to activate the genset. If xx=off = Deactivates the assigned output to activate the genset.  The administrator (operator 1) can restrict this action to other operators.  You must have parameter 21 (<i>Modbus 2005h</i>) in F300 if you use the relay output or in F301 for DO1, or in F302 for DO2 (DO2 depending on drive size). | * Depending on the operator : ▶ Message to sender confirming action (also to operator 1, if param2=1) ▶ Message to sender of rejection by unauthorised operator |
| Param | 1 only | Send : param Request the status of the administrator settings and the script version of the EURA-TITAN .  Restricted to the administrator (operator 1). | * Depending on the operator : ▶ Message to the informative sender with the established settings ▶ Message to sender of rejection by unauthorised operator |

| Message | Operator | Instruction / Action | Response |
|---------|----------|---|---|
| Paramx= | 1 only | <p>Send : paramx=n (being x a value from 1 to 4 param1= Not used in this version param2= Allow operators <>1 to start the group = 0 = Do not permit = 1 = Permit param3= VFD alarm notifications = 0 = Operator 1 only = 1 = To all registered operators param4= Allow operators <>1 to change SP's = 0 = Permit = 1 = Do not permit</p> <p> Restricted to the administrator (operator 1). By default, all paramx are set to 0.</p> | <p>* Depending on the operator and value sent: ▶ Action confirmation message to sender ▶ Message to sender of error in setting ▶ Message to sender of rejection by unauthorised operator</p> |

Messages sent to **EURA-TITAN**. can be combined at will, upper and/or lower case

ALARM INFORMATION MESSAGES :

Table of error messages that **EURA-TITAN** will send in each case.

| Code | Message received | Remedial action |
|---------|---|---|
| 2:OC | Inverter with alarm OC : Overcurrent | Increase the time of Ac./Deac. Check the motor wiring. Check the mechanical system. Reduce the starting torque. Check motor parameters |
| 3:OE | Inverter with alarm OE : Overvoltage | Check the voltage input. Correct Rated voltage of the inverter. Use braking resistors. Increase the deceleration time. |
| 4:PF1 | Inverter with alarm PF1 : Lack of phase in the input | Check network entry. |
| 5:OL1 | Inverter with alarm OL1 : Overload | Reduce the power Check the dimensioning of the equipment. |
| 6:LU | Inverter with alarm LU : Low voltage | Check network supply |
| 7:OH | Inverter with alarm OH : Inverter overheating | Check environmental working conditions. Check the parameterization Check the drive assembly. |
| 8:OL2 | Inverter with alarm OL2 : Motor overheating | Reduce the load Check the dimensioning of the equipment . |
| 11:ESP | Inverter with alarm ESP : External alarm | Disconnect external emergency condition, emergency button, safety curtain, etc. |
| 12:Err3 | Inverter with alarm ERR3 : Overcurrent at STOP | Visual inspection of the inverter and the installation. Contact EURA Service-Center |
| 15:Err4 | Inverter with alarm ERR4 : Current sensor error | Visual inspection of the inverter. Contact EURA Service-Center |
| 16:OC1 | Inverter with alarm OC1 : Software overcurrent | Increase the time of Ac./Deac. Check the motor wiring. Check the mechanical system. Reduce the starting torque. Check motor parameters. |

| Code | Message received | Remedial action |
|---------|---|---|
| 17:PF0 | Inverter with alarm PF0 : Problem in phase at the output | Check motor and wiring. |
| 18:AErr | Inverter with alarm AErr : Analog signal interruption | Check the wiring. Review the correct programming of the minimum limit. Check the analog input signal. |
| 20:EP | Inverter with alarm EP : Low water load | Review of mechanics. Reset the water supply. |
| 22:nP | Inverter with alarm nP : Overpressure | Faulty Pump Control Settings. Check water supply. |
| 23:Err5 | Inverter with alarm Err5 : PID faillure | Review incorrect parameterization of the <i>PID</i> |
| 25:EP4 | Inverter with alarm EP4 : Dry running | Check admission circuit to the pump (s). Check that the inlet valves are open. Check that there is water in the inlet pipe. |
| 35:OH1 | Inverter with alarm OH1 : Motor overheated | Check the motor . |
| 45:CE | Inverter with alarm CE : Excessive waiting time in communications | Check <i>MODBUS</i> wiring. Check <i>MODBUS</i> parameterization |
| 47:EEP | Inverter with alarm EEP : EEProm failure | Contact EURA Service-Center |
| 49:Err6 | Inverter with alarm Err6 : Whatchdog failure | Check the <i>Watchdog</i> in the assigned digital input |
| 56:nP1 | Inverter with alarm nP : Overpressure IN1 | Faulty Pump Control Settings. Check water supply. |
| 57:EP5 | Inverter with alarm EP5 : Dry running IN1 | Check admission circuit to the pump (s). Check that the inlet valves are open. Check that there is water in the inlet pipe. |
| 58:AEr0 | Inverter with alarm AEr0 : IN2 sensor signal failure | Check the wiring. Check the sensor connected to <i>IN2</i> . |
| 67:OC2 | Inverter with alarm OC2 : Software overcurrent | Increase the time of Ac./Deac. Check the motor wiring. Check the mechanical system. Reduce the starting torque. Check motor parameters. |
| 69:EP6 | Inverter with alarm EP6 : Water leak detected | Check pipes. Check obstruction in the circuit or semi-closed valves. |
| 71:FILL | Inverter with alarm FILL : Pipeline filling failed | Check pipeline installation . |
| 73:AEr1 | Inverter with alarm AEr1 : Sensor signal failure IN1 | Check the wiring. Check the sensor connected to <i>IN1</i> . |
| 74:ArT0 | Inverter with alarm ArT0 : Time control parameters failure | Review the parameters of section FDxx . |
| 75:ErJA | Inverter with alarm ErJA : Pump jammed | Check that there is no solid body blocking the rotation of the pump. |
| | Inverter with undefined alarm... | Inverter does not respond or perceived alarm is not documented |

In order to be processed by all telephone companies, none of the texts sent by **EURA-TITAN** are accented.

