

**ABI - Familia de inversores fotovoltaicos trifásicos TL para  
conexión directa a redes de distribución / Family of TL three-  
phase photovoltaic inverters for direct connection to distribution  
networks**

**FW DISPLAY INGECON SUN 3PLAY TLM**

**ABI1002IPB02\_G.DOCX**

**IPB - DESCRIPCIÓN DE REVISIONES DE SOFTWARE /  
SOFTWARE REVISION DESCRIPTION**

Haga clic aquí para escribir texto.

Realizado por / <i>Elaborated by:</i>	G.A.E.
Fecha creación / <i>Created:</i>	05/05/2015
Revisado por / <i>Revised by:</i>	A.P.L.
Aprobado por / <i>Approved by:</i>	F.J.A.
Fecha de aprobado / <i>Approval date:</i>	26/02/2020
Documento / <i>Document:</i>	ABI1002IPB02_G.docx
Plantilla / <i>Template:</i>	IPB_D.dotx

## Tabla de contenido / *Table of contents*

1	VER._C. Released on 2015/05/05 .....	3
1.1	New feature .....	3
1.2	Changed from previous version.....	3
1.3	Bug fixed.....	3
2	VER._D. Released on 2015/09/16 .....	4
2.1	New feature .....	4
2.2	Changed from previous version.....	4
2.3	Bug fixed.....	4
3	VER._E. Released on 2016/02/23 .....	5
3.1	New feature .....	5
3.2	Changed from previous version.....	7
3.3	Bug fixed.....	7
4	VER._F. Released on 2016/05/12 .....	8
4.1	New feature .....	8
4.2	Changed from previous version.....	8
4.3	Bug fixed.....	8
5	VER._G. Released on 2016/11/04 .....	9
5.1	New feature .....	9
5.2	Changed from previous version.....	9
5.3	Bug fixed.....	9
6	VER._H. Released on 2018/01/04 .....	10
6.1	New features.....	10
6.2	Changed from previous version.....	10
6.3	Bug fixed.....	10
7	VER._I Released on 12/02/2019.....	11
7.1	New features.....	11
7.2	Changed from previous version.....	11
7.3	Bug fixed.....	11
8	VER._J Released on 26/02/2020 .....	12
8.1	New features.....	12
8.2	Changed from previous version.....	12
8.3	Bug fixed.....	12

## **1 VER.\_C. Released on 2015/05/05**

---

### **1.1 New feature**

Display now starts with screen off to avoid blinking at starting on mornings or ending at night

Graphics are scalable now in X axis in power graph and in Y axis in Energy graph

New screen to modify cosPhi and the sign.

Lock screen option added to protect inverter against any modification.

New self consumption screen added

New Vac added for Mexican regulation Vac= 254 V.

New Vac split phase added: Vac= 240 V Split phase

### **1.2 Changed from previous version**

VF settings names are changed for Italian regulations.

Changed names for some Spanish regulations.

### **1.3 Bug fixed**

An error in day energy graph is fixed. The error affects to the end hour calculation.

Error in daily production is fixed. The graphic was not correct when the production passes 8 hours.

## **2 VER.\_D. Released on 2015/09/16**

---

### **2.1 New feature**

United Arab Emirates country is added with DEWA regulation

Digital input and backup mode are created but aren't available yet.

### **2.2 Changed from previous version**

Self consumption changed. In ESPAÑA country there is no possibility to change Power set point neither to revert self consumption if selected.

### **2.3 Bug fixed**

Exit from FW update screen wasn't refreshed always so sometimes couldn't exit from processing.

Solved problem using SD card. Sometimes a reset could happen if previously a reset command was sent.

### 3 VER.\_E. Released on 2016/02/23

#### 3.1 New feature

Added NETBILLING regulation for Chile country.

Added new V/F parameter configuration in advanced settings.

Added Waiting time configuration in Advanced settings

The V/F Settings and the Connection Waiting Time Settings are shown in the "Inverter Data" menu.

Here we can see the correspondence between the monitored data on the screen and those indicated in CHILE NETBILLING standard.

2016-2-03 16:05	
Datos de inductor	
S/N	130613010000
FW APP	ABE1000_I
FW BOOT	ABF1002_E

2016-2-03 16:05	
Pais normativa:	
CHILE	
NETBILLING	
Vac=220V	
Fac=50 Hz	

2016-2-03 16:05	
Ajustes V/F	
VacH2	----V
VacH1	253V
VacL1	176V
VacL2	----V

→	Protección contra sobretensiones breves V>>
→	Protección contra caídas de tensión V<

2016-2-03 16:05	
Ajustes V/F	
FacH2	----Hz
FacH1	51.50Hz
FacL1	47.50Hz
FacL2	----Hz

→	Protección contra subidas de la frecuencia F>
→	Protección contra caída de la frecuencia F<

<div>2016-2-0316:05</div> <div> <div>Ajustes V/F</div> <div> <div>T.VacH2100ms</div> <div>T.VacH1100ms</div> <div>T.VacL1100ms</div> <div>T.VacL2100ms</div> </div> </div>	<div>Tiempo Protección contra sobretensiones breves V&gt;&gt;</div> <div>Tiempo Protección contra caídas de tensión V&lt;</div>
<div>2016-2-0316:05</div> <div> <div>Ajustes V/F</div> <div> <div>T.FacH2100ms</div> <div>T.FacH1100ms</div> <div>T.FacL1100ms</div> <div>T.FacL2100ms</div> </div> </div>	<div>Tiempo. Protección contra subidas de la frecuencia F&gt;</div> <div>Tiempo. Protección contra caída de la frecuencia F&lt;</div>
<div>2016-2-0316:05</div> <div> <div>Ajustes V/F</div> <div> <div>ModoHabilitado</div> <div>VacAvg242V</div> </div> </div>	<div>Protección contra sobretensiones (media 10-minutos) V&gt;</div>
<div>2016-2-0316:05</div> <div> <div>Ajustes V/F</div> <div> <div>ModoHabilitado</div> <div>VacHOff242V</div> <div>VacLOff187V</div> </div> </div>	<div>Límite Superior de tensión V&gt;</div> <div>Límite inferior de tensión V&lt;</div>
<div>2016-2-0316:05</div> <div> <div>Ajustes V/F</div> <div> <div>ModoHabilitado</div> <div>FacHOff50.20 Hz</div> <div>FacLOff47.50 Hz</div> </div> </div>	<div>Límite Superior de frecuencia F&gt;</div> <div>Límite Inferior frecuencia F&lt;</div>
<div>2016-2-0316:05</div> <div> <div>Tiempo de Espera</div> <div> <div>Estándar60 s</div> <div>Especial60 s</div> <div>Modo Esp.Deshabilitado</div> </div> </div>	<div>Tiempo reconexión. Incluido desconexiones breves.</div>

### **3.2 Changed from previous version**

Settings menu and advanced settings menu haven't anymore Not available options.

### **3.3 Bug fixed**

Solved problem changing some variables they weren't updated after modification.

Solved problem when display sends FW version data to inverter. Now there is a specific function to do that.

## **4 VER.\_F. Released on 2016/05/12**

---

### **4.1 New feature**

Added new 3 PLAY 33 KW and 40 KW features.

Added new screens for string configuration.

### **4.2 Changed from previous version**

Some Vac values in country regulation are not available for a 33 KW or 40 KW inverters.

### **4.3 Bug fixed**



## **5 VER.\_G. Released on 2016/11/04**

---

### **5.1 New feature**

Added new screen for auxiliary digital input configuration to allow on/off purpose. Auxiliary digital input can be configured to start and to stop the inverter. This input can be used, for example, to fulfill with Australian regulation, working as DRMO command.

New countries added: New Zealand, El Salvador and Egypt have been added to “country regulation” display menu.

New regulations added:

- BDEW has been added in WORLDWIDE menu.
- FRANCE HV has been added in WORLDWIDE menu.
- PANAMA GRID CODE has been added in WORLDWIDE menu.
- N20 has been added in WORLDWIDE menu.
- AS4777 NEW ZEALAND has been added.
- EL SALVADOR has been added.
- EGYPTERA has been added.

### **5.2 Changed from previous version**

AS4777 has been updated to 2015 revision.

### **5.3 Bug fixed**

## **6 VER.\_H. Released on 2018/01/04**

---

### **6.1 New features**

New screens have been added to allow 1 and 2 digital inputs configuration. Both digital inputs can be configured to start and to stop the inverter.

New screens to indicate when the fans test is available have been added. The test is only available when the inverter is connected to the grid.

### **6.2 Changed from previous version**

A new label for LOW\_VAC Pac reduction has been included in the PowerDeratingReason structure.

### **6.3 Bug fixed**

Automatic restarting has been added to CAN communication. CAN communication could be locked with a lot of errors. Now and automatic restarting is launched to restored the communication.

## **7 VER\_I Released on 12/02/2019**

---

### **7.1 New features**

In the last screen of extra data, you can see the stop event and the instantaneous stop event.

The standard Allegato A68 is available.

### **7.2 Changed from previous version**

In order to introduce another password to change the access level, you have to select "Access level" instead of "Change password".

### **7.3 Bug fixed**

If you wanted to select regulation for Brazil through the country filter, you could not choose any regulation. Now you can choose the corresponding regulation and also, one of the normal grid voltages in Brazil.

## **8 VER\_J Released on 26/02/2020**

---

### **8.1 New features**

New standards added:

- RD+UNE206007 Canarias
- RD+UNE Canarias+P.O.12.3

### **8.2 Changed from previous version**

In World wide menu, 120Vac 127Vac and 208Vac, are selectable for every model. The inverter decides to accept or not the configuration depending on the device model and the set up.

In Brasil menu, 127Vac is now available.

### **8.3 Bug fixed**