

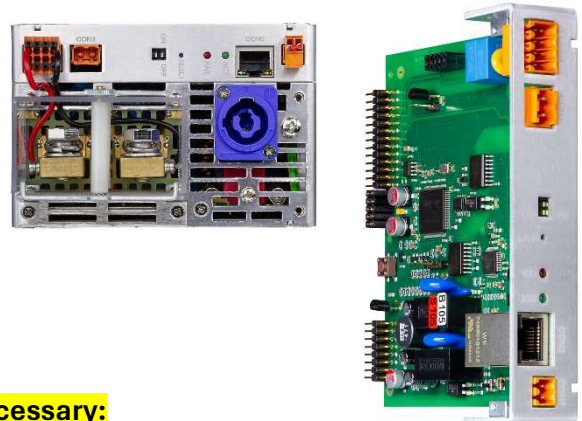
Product Launch May – 01 / 2024

Product series amended with LAN Interface

CPS-EP2000/CPS-EP3000...DIGI

CPS-EX2000/CPS-EP3000...DIGI

CPS-i2000/CPS-i3000...DIGI



A few words to our advanced interface system is necessary:

[Main performance Differences between former version and amended version of the product lines:](#)

Previously, the power supply units were only available with an analogue interface. The versions with the analogue interface have not undergone any changes and will continue to be available as a basic product of the respective power supply series.

CAMTEC is supplementing the power supplies with a digital LAN interface called DIGI3201. This is an electrically isolated interface with standard Ethernet protocol. It enables power supply DC-clusters setup with up to 35 units of the same model.

The DIGI3201 LAN module can be installed into any of the above power supply units.

As soon as the power supply unit is switched on, the DIGI3201 automatically recognizes the power supply unit and calibrates itself. No further action is required on the part of the manufacturer or the operator. This means that the interface can be exchanged between the models and analogue power supplies can also be upgraded very easily in the field!

[⇒ Design to Maintenance:](#)

One of the main advantages of our LAN interface is the following. If a power supply fails in the field, in most cases the interface is damaged by overcurrent or interference from the customer's system. In rare cases, the power supply at the AC input is damaged. If a power supply unit at the AC input is damaged by overvoltage, in many cases the power supply unit is so badly damaged that it is often not economical to repair it.

On the other hand, damage to the interface is a minor matter and returning the complete power supply unit is too expensive in comparison.

[⇒ Arguments in favor of a Camtec CPS power supply unit with DIGI3201 interface:](#)

The DIGI3201 helps to avoid high repair costs. Having an interface in stock is much cheaper than a complete power supply unit. Shipping a DIGI3201 interface around the world incurs only minimal costs compared to shipping a 5kg SMPS system - the taxes and additional costs for express shipping are also significantly lower.

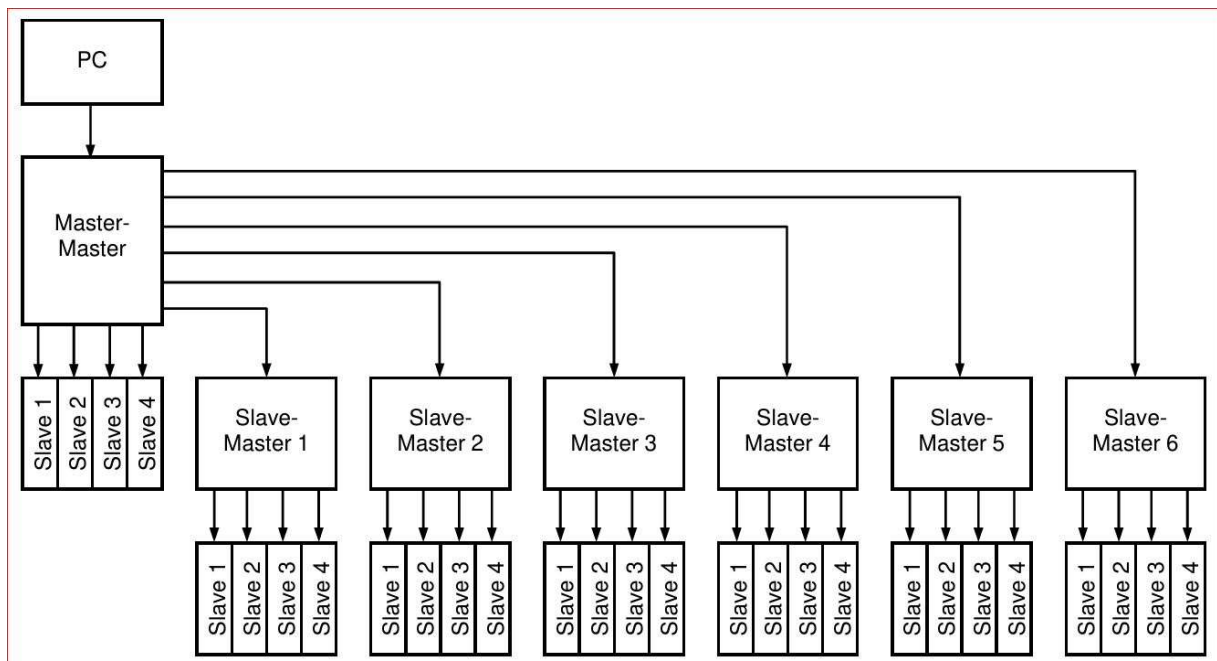
[⇒ Repairs can be carried out by the system owner on site and downtime is minimized!](#)

The following table provides an overview of the system differences and improvements

| Feature | Old version analogue interface | Improved version analogue interface | New version .DIGI with LAN interface |
|--|---|--|--|
| CS-Bus for parallel operation to increase power | 5 pcs maximum: 1 Master + 4 Slaves DC-grid of 35pcs | 7 pcs maximum with the option of 10pcs or even more with the support of Camtec engineering team 1 Master and 7 to N+1 Slaves Currently our engineering team is carrying out a test row how many pcs could safely be controlled from the CS bus | 5 pcs in a DC grid of up to 35pcs with a Master-Master, Slave-Masters and Slaves configuration (we already work on a version with 10pcs or more, this will follow when the test row of the analogue version has been closed. The CS-bus of the DIGI versions is still on analogue basis) |
| Power Sink Option | Yes | Yes | Yes |
| Signaling | 4.0 compatible | 4.0 compatible | 4.0 compatible |
| Sensing | Yes | Yes | Yes |
| Web Browser Config | - | - | Yes |
| Interface detects model | No | No | Yes, auto calibration |
| Working Isolation | 600Vdc | 600Vdc | 600Vdc |

The below schematic show the setup of a DC-grid with DIGI3201 interface:

The Setup requires an external standard LAN switch (unmanaged)



| Basic Differences between the Series | | | |
|--|-------|--------|--------|
| | CPS-i | CPS-EX | CPS-EP |
| Voltage Programming range via interface | 0-X | L-X | - |
| Current Programming range via interface | 0-X | L-X | - |
| Voltage Set range via internal potentiometer | 0-X | L-X | X |
| Current Set range via internal potentiometer | 0-X | L-X | - |
| Fuse Mode | X | - | - |
| Continous Mode (for current mode) | X | X | X |
| Master-Slave operation | X | X | - |
| Power Sink internal for HS-programming | X | - | - |
| AC OK Signal | X | X | X |
| DC OK Signal | X | X | X |
| Standby | X | X | - |
| Shutdown | X | X | X |
| Inhibit (Interlock) | X | X | X |
| Temperature Signal 10mV/°C | X | X | - |
| Temperature Alarm for early warning | X | X | - |
| Over Temperature signal | X | X | X |
| Fan-fail | X | X | X |
| Fan Tacho signal (also detects bearing wear) | X | X | - |
| Current Share Bus (CS/CSB) | X | X | X |
| Sense operation 2V per load line | X | X | X |
| Reference Voltage 5V | X | X | - |
| Auxiliar Voltage 12V | X | X | - |
| DIGI3201 LAN Interface | X | X | X |