**K-SUPPLY**
Redundant power supply module with overvoltage protection

- **Power supply:** 19.2-30 VDC
- **Max. voltage drop:** 300 mV
- **Input:** 2 independent channels, max. current per terminal 4 A
- **Differential mode filter**

**K-BUS**
Expandable power supply connector (EN 60175)

- **Expandable K-BUS connector** mounts inside DIN rail. Each connector supports two devices. Allows the distribution of power to connect devices to a voltage source.

**ORDER CODE**
- **K-SUPPLY** Power supply module with electronic protection
- **K-BUS** 2 slot expandable power supply connector

**K-LINE POWER SUPPLY TECHNIQUES**

With the exception of loop powered instruments, which aren’t bus powered, K-Line signal conditioners can be powered 3 different ways.

- **19 to 30 VDC power directly to signal conditioner.**
- **Up to 16 devices:** SMART SUPPLY system using K-BUS connectors. Power is distributed by connecting a single device to the voltage source, as long as total power consumption doesn’t exceed 400 mA.
- **17 to 75 devices:** K-SUPPLY module with on-board over-voltage protection with maximum current consumption of 1.6 A (approx 21 mA per module). This method allows use of a redundant power supply for critical applications.

**SMART SUPPLY SYSTEM**
Distributed supply with 2 slot connector K-BUS (up to 16 modules)

**POWER SUPPLY CONNECTED TO MODULE TERMINALS**

**MULTI-BUS CONNECTION**

**SMART SUPPLY SYSTEM**
Distributed supply with K-SUPPLY module and K-BUS (up to 75 modules)

**REMOVING MODULE FROM DIN RAIL**

**CONNECTION AND INSTALLATION**

Power supply module with on-board over-voltage protection

- **24 to 14 AWG**
- **Strip 5/16”**

K-BUS connector snaps into DIN rail

Attaching module to DIN rail

Removing module from DIN rail

**CAGE CLAMP CONNECTION**

**K-BUS CONNECTOR SNAPS INTO DIN RAIL**

**ATTACHING MODULE TO DIN RAIL**

**REMOVING MODULE FROM DIN RAIL**
**EASY USB**

USB - UART TTL Converter

- Power supply: PC 5V @100mA
- Protection degree: IP20
- Serial UART TTL: RJ11 connector
- Baud rate: 300 bps up to 250 Kbps
- Serial USB: USB type A standard 1.0, 1.1, 2.0
- Dimensions: 84x21x17 mm
- Operating systems: Windows, Mac OS, OS-X, Linux

**ORDER CODE**

**EASY-USB** - USB - UART TTL Converter

---

**S117P1**

Serial converter RS232-USB, TTL-USB, RS485-USB

- Asynchronous serial RS232, RS485 and TTL conversion
- Multiple S117P1 connections on the same computer
- Standard compatibility with USB 1.0, 1.1, 2.0
- RS485 communication, max 32 nodes
- Power for external modules (100mA, 12 VDC)
- Accessories included: USB cable, TTL cable, CD driver + EASYLP (configuration software for K120RTD, K121, T120 and T121)

**ORDER CODE**

**S117P1** - Asynchronous serial converter RS232 <-> USB, RS485 <-> USB, TTL <-> USB

Includes USB cable, TTL cable, CD driver + EASYLP configuration software

---

**EASY SETUP / EASY LP**

Complete collection of plug&play configurators

**FREE software downloads**

- For K111 - K121, K120RTD

---

**APPLICATION NOTE**

The S315 accepts a 4-20 mA current signal input. Its operating power is derived from the current loop. The 4 digit display can be scaled via the front keys. The compact 1/8 DIN size saves space in the electrical panel.

**S315**

4 digit loop powered display with 4-20 mA input signal

**S315-IP66**

4 digit loop powered display with 4-20 mA input signal and IP66 case

**Electrical Specifications**

- Type: 4-20 mA
- Power supply: By loop (max 30 V)
- Voltage drop: Max 7 V
- Memory: EEPROM, 10 years
- Display: 4 digit, red LEDs
- Front buttons: 3 (down, up, OK/menu)
- Programming: Front keys (password, scale start, full scale, decimal point, filter)
- Access protection: By password
- Accuracy: ±0.05%
- Stability: ±0.005%/°C
- Linearity error: ±0.05%
- A/D resolution: 16 bit
- EMI: < 1%

**Mechanical Specifications**

- Operating temperature: –10 to +65°C
- Terminal block: Removable 2 position screw terminals, 5.08mm pitch
- S315 enclosure: PPO self-extinguishing, DIN 43700
- S315 protection rating: IP65 (front)
- S315 dimensions: 96 mm W x 48 mm H x 40 mm D
- S315 panel cut-out: 92 mm W x 45 mm H (1/8 DIN)
- S315 weight: 200 g
- S315-IP66 enclosure: ABS RAL 7035
- S315-IP66 protection rating: IP66
- S315-IP66 dimension: 130 mm W x 89 mm H x 60 mm D
- S315-IP66 weight: 280 g

**Approvals and Standards**

- S315 approval: CE
- S315 standards: EN 61000-6-4, EN 64000-6, EN 61010-1, EN 60742
- S315-IP66 approvals: CE, UL, NEMA
- S315-IP66 standards: EN 61000-6-4, EN 64000-6, EN 61010-1, EN 60742, EN 50298, EN 60259, EN 62262, UL 94 HB, NEMA 1, 4, 4X, 6

**ORDER CODES**

**S315**

4 digit loop powered indicator, 4-20 mA input

**S315-IP66**

4 digit loop powered indicator, 4-20 mA input with IP66 housing

---

**ACTIVE TRANSDUCER**

**Vmax=30V**

**Active Transducer**

Max drop voltage on loop: 7 V

**POWER NETWORK**

**Recorder**

**S315**

4-20 mA

---

**API USA**

1220 American Way Libertyville, IL 60048
Phone: 800-942-0315 Fax: 800-949-7502
api-usa.com