



## Signal Converter FU201 / IV201 / ZU210

Frequency (FU210)

SSI absolute value (IV210) →

Pulse counter (ZU210)

Analog (current / voltage)

Serial (RS232 / RS485)

### Product Features:

- Multifunctional unit with operating modes for incremental encoder or SSI absolute encoder
- For incremental encoder:
  - Operating modes for frequency converter or position converter (pulse counter)
  - Universal incremental inputs (HTL/TTL/RS422) for encoders or sensors with NPN/PNP/NAMUR characteristic
  - Functions as linking (e.g. A+B), scaling, filtering, start-up suppression, ...
  - Input frequency up to 1 MHz
- For SSI absolute encoder:
  - Operating modes for master or slave with clock frequencies up to 1 MHz
  - For single turn and multi turn encoder with SSI formats of 10... 32 bit
  - Functions as wire breakage monitoring, bit blanking, concentricity functions, scaling, ...
- 16-bit analogue output, configurable for voltage or current operation
- RS232/RS485 interface for configuration and serial read out
- Extremely short conversion times
- Linearization with 24 control points
- 5 and 24 V auxiliary output for encoder supply
- Numerous connection options by 6 control inputs and 6 control outputs
- Snap-on housing for top hat rail (according to EN 60715)
- Intuitive and easy parameterization via user interface OS 6.0 (freeware)

Technical Specifications		
<b>Connections:</b>	Anschlussart:	Schraubklemmen 1,5 mm <sup>2</sup> / AWG 16
<b>Power supply DC:</b>	Input voltage: Protection circuit: Consumption: Fuse protection:	18 ... 30 VDC reverse polarity protection approx. 50 mA (unloaded) external fuse T 0,5 A
<b>Encoder supply:</b>	Output voltage: Output current:	5 VDC and 24 VDC (approx. 1 V lower than power supply) max. 250 mA
<b>Incremental inputs:</b>	Channels: Configuration: RS422: HTL differential: TTL / HTL (PNP / NPN): Load:	A, /A, B, /B RS422, TTL, HTL differential, HTL PNP or HTL NPN max. 1 MHz (RS422 differential signal > 0,5 V) max. 500 kHz (HTL differential signal > 2 V) max. 250 kHz max. 6 mA / Ri > 5 kOhm / 10 pF
<b>SSI interface</b>	Channels: Configuration: Format: Frequency: Resolution: Load:	Clock, /Clock, Data, /Data Master or slave Binary or gray code max. 1 MHz 10 ... 32 Bit max. 3 mA / Ri > 10 kOhm / 10 pF
<b>Control outputs:</b>	Number of outputs: Format: Frequency: Load:	6 HTL, PNP (Low 0 ... 3 V, High 9 ... 30 V) max. 10 kHz max. 2 mA / Ri > 15 kOhm / 470 pF
<b>Analog output:</b>	Configuration: Voltage output: Current output: Resolution / accuracy: Reaction time:	Current or voltage output -10...+10 V (max. 2 mA) 0/4 ... 20 mA (burden: max. 270 Ohm) 16 Bit / ± 0,1 % < 1 ms
<b>Control outputs:</b>	Number of outputs: Format / level: Output current: Reaction time:	6 5 ... 30 V (depend on the COM+ voltage). PNP max. 200 mA < 1 ms
<b>Serial interface:</b>	Format: Baud rate:	RS232 or RS485 9600, 19200 or 38400 baud
<b>Display:</b>	LED:	Green status LED
<b>Enclosure:</b>	Material: Mounting: Dimensions (w x h x d): Protection class: Weight:	plastic 35 mm top hat rail (according to EN 60715) 23 x 102 x 102 mm / 0.9 x 4.02 x 4.02 '' IP20 ca. 100 g
<b>Ambient temperature:</b>	Operation: Storage:	-20 °C ... +60 °C / -4 °F ... +140 °F (without condensation) -25 °C ... +75 °C / -13 °F ... +161 °F (without condensation)
<b>Conformity and standards:</b>	EMV 2014/30/EU: RoHS (II) 2011/65/EU RoHS (III) 2015/863:	EN 61000-6-2, EN 61000-6-3, EN 61000-6-4, EN 61326-1 EN IEC 63000