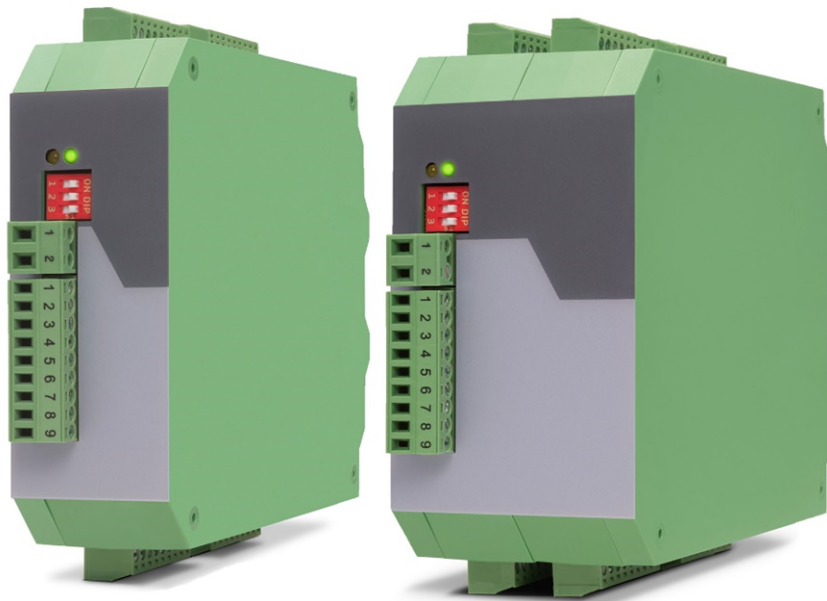




GV224 / GV228 GT222 / GT224 / GT228

Pulse splitters for incremental encoders with and without potential separation

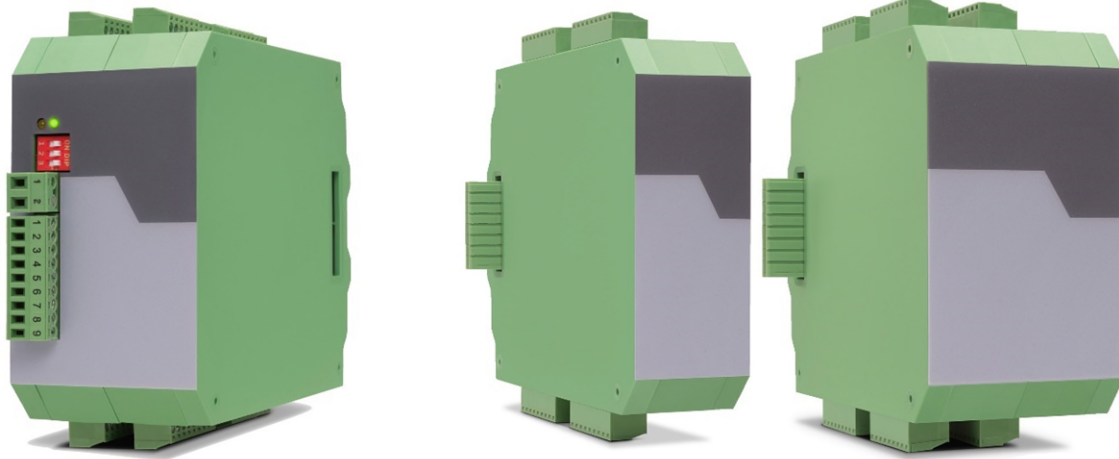
Product features:

- Power supply from 10 up to 30 VDC
- 1 encoder input for channels A, /A, B, /B, Z, /Z
- Input levels selectable between RS422, TTL and HTL
- Optionally types with 2, 4 or 8 outputs with or without potential separation available (see below)
- Output levels are specified by external power supply
- Short-circuit proof +5VDC and +24VDC encoder supply

Available devices:

- **GV224:** Pulse splitter with 1 encoder input and 4 outputs
- **GV228:** Pulse splitter with 1 encoder input and 8 outputs
- **GV228/EV:** Pulse splitter with 1 encoder input and 8 outputs with extension option for 4 or 8 outputs (EV224 / EV228)
- **GT222:** Pulse splitter with 1 encoder input and 2 potential separated outputs
- **GT224:** Pulse splitter with 1 encoder input and 4 potential separated outputs
- **GT228:** Pulse splitter with 1 encoder input and 8 potential separated outputs
- **GT228/ET:** Pulse splitter with 1 encoder input and 8 potential separated outputs with extension option for 4 or 8 potential separated outputs (ET224 / ET228)

Technical Specifications		
Power supply:	Input voltage: Protection circuit: Ripple: Consumption: Connections:	10 ... 30 VDC Reverse polarity protection ≤ 10 % at 24 VDC approx. 25 mA, with an unloaded encoder supply screw terminal, 1,5 mm ² / AWG16
Encoder supply:	Output voltage 1: Output current: Output voltage 2: Output current: Protection: Connections: Further possibilities:	24 VDC (ca. 0,8 V less than supply voltage) max. 250 mA, (galvanically connected with the power supply) 5 VDC max. 500 mA, (galvanically connected with the power supply) short circuit proof screw terminal, 1,5 mm ² / AWG16, 9-pin a) Externally by a separate source b) By the same source that supplies the splitter (10...30V)
Incremental input:	Signal levels (selectable): Channels: Frequency: Connections:	RS422 (differential voltage > 0,5 V), HTL Differential (differential voltage > 2 V), HTL (asymmetrical): LOW: 0 ... 5 V, HIGH: 9 ... 30 V TTL (asymmetrical): LOW: 0 ... 0.6 V, HIGH: 2.2 ... 5 V asymmetrical: A, B, Z or symmetrical: A, /A, B, /B, Z, /Z max. 1 MHz at RS422 max. 1 MHz at HTL Differential max. 350kHz at SE TTL / SE HTL screw terminal, 1,5 mm ² / AWG16
Incremental outputs:	Number of outputs: Output logic: Signal levels: Signal delay time: Output current: Protection: Connections:	2 (GT222), 4 (GT224/GV224) resp. 8 (GT228/GV228), push-pull 5 ... 30 V (can be supplied by respective ext. COM+ terminal) approx. 160 ns (typical) max. 430 ns (worst-case) max. 30 mA short-circuit proof screw terminal, 1,5 mm ² / AWG16
Potential separation:	GT222 / GT224 GT228	Potential separation between input and the outputs as well as all outputs among each other.
Indicators:	Number of indicators: Function:	2 LEDs 1 x green for "ready for operate" state 1 x yellow for error detection at the inputs A, B, Z
Housing:	Material: Mounting: Dimensions (B x H x T): Weight: Dimensions (B x H x T): Weight: Protection:	plastic mounting rail (EN 60715, 35mm C-Profile) GV224/GT222/GT224: 34 x 100 x 131 mm / 1.34 x 3.94 x 5.16 inches (w x h x d) (without connectors) 34 x 118 x 140 mm / 1.34 x 4.65 x 5.51 inches (w x h x d) (inclusive connectors)) approx. 160 g GV228/GT228: 54 x 100 x 131 mm / 2.13 x 3.94 x 5.16 inches (w x h x d) (without connectors) 54 x 118 x 140 mm / 2.13 x 4.65 x 5.51 inches (w x h x d) (inclusive connectors) approx. 240 g IP20
Ambient temperature:	Operation: Storage:	-20 °C ... +60 °C / -4 °F ... +140 °F (not condensing) -30 °C ... +75° C / -22 °F ... +167 °F (not condensing)
Failure rate:	MTBF in years: (continuous operation at 60 °C / 140 °F)	GT222: 131,7 a GV224: 120,9 a / GT224: 102,0 a GV228: 85,4 a / GT228: 67,7 a
Conformity & standards:	EMC 2014/30/EU: RoHS (II) 2011/65/EU RoHS (III) 2015/863:	EN 61326-1: 2021 for industrial location EN 55011: 2016 + A1: 2017 + A11: 2020 + A2: 2021 Class A EN IEC 63000: 2018



EV224 / EV228 ET224 / ET228

Extension modules for pulse splitters with and without potential separation

Product features:

- Supply voltage via bus connector
- Encoder input via bus connector
- Optionally 4 or 8 additional outputs with or without potential separation (see below)
- Output level is specified by external voltage supply

Available devices:

- **EV224:** Extension module with 4 outputs
- **EV228:** Extension module with 8 outputs
- **ET224:** Extension module with 4 potential separated outputs
- **ET228:** Extension module with 8 potential separated outputs