



RESOLVE R
G-RDC

RESOLVER TO DIGITAL CONVERTER

The LTN G-RDC is a position data converter.
The LTN G-RDC drives autonomously a resolver sensor and converts its output signals to digital position data.



SPECIFICATIONS - CONVERTER OUTPUT / CONTROL

Output Signals:	16 bit: binary position data, parallel, H-active 1 bit: /BIT (Error), L-active
Input Signal:	1 bit: / Inhibit, L-active 1 bit: / Enable, L-active
Resolution:	16-bit / 65536 steps per revolution
Output Voltage Level:	TTL (5 V)
Output Current:	30 mA
Accuracy:	0,072° (4 arcmin +1 LSB max.)
Repeatability:	+/- 1 LSB
Angular speed:	up to 18 s ⁻¹ (to be specified on order)

RESOLVER OUTPUT / INPUT

Output Ref. Signal:	8 V _{pp} (diff.) 100 mA max. 5 kHz
Input SIN / COS:	4 V _{pp} (max.) Resolver Transformation Ratio K = 0,5

POWER SUPPLY

Supply Voltage (+Vs):	+10 to +36 V _{DC}
Power Consumption:	~1,5 W (e.g. 60 mA at 24 V)
Operating Temperature:	0 to +85°C

The supply voltage can be supplied via the power connector or optionally via the encoder connector (from the encoder decoding unit).
The G-RDC is protected against the wrong polarity and transient overvoltage of power supply and short circuit proof on output terminals.

Housing:	Phoenix Contact „M E 22,5“ for top hat rail mounting
Dimensions:	l = 114,5 mm; h = 99 mm, w = 22,5 mm

CONNECTOR TERMINALS

Data Out /Controll I/O:
Sub-D, 25-pole female
-> mating connector: male

Pin 1	Out DB1 (M SB)
Pin 2	Out DB2
Pin 3	Out DB3
Pin 4	Out DB4
...	...
...	...
Pin 13	Out DB13
Pin 14	Out DB14
Pin 15	Out DB15
Pin 16	Out DB16 (LSB)
Pin 17	Out /BIT (Error)
Pin 18	IN /Inhibit
Pin 19	IN /Enable
Pin 20	NC
Pin 21	NC
Pin 22	NC
Pin 23	V _s (Opt.)
Pin 24	G ND
Pin 25	G ND
Screen	PE

Resolver IN:
Sub-D, 9-pole female
-> mating connector: male

Pin 1	Ref-
Pin 2	-
Pin 3	-
Pin 4	-
Pin 5	SIN+
Pin 6	SIN-
Pin 7	Ref+
Pin 8	C OS+
Pin 9	C OS-
Screen	PE

Power connector:
4-pole plug, screw wire connection,
included

Pin 1 (left)	+V _s
Pin 2	+V _s
Pin 3	GND
Pin 4	GND
Max. loopthroughed current:	
+V _s :	Pin 1 - Pin 2: 3 A
GND:	Pin 3 - Pin 3: 3 A

The PE connection (protective earth) is implemented over the mounting clamp to the top hat rail.

ORDERING INFORMATION

G-RDC TLSC65536-0XX-24

Supply Voltage (+V_s): +10 to +36 V_{DC}

Output Voltage Level: TTL (5 V)

Other configurations on request.