

S-DIAS Counter Input Module FC 021



- with 2 digital RS422 inputs with counter function
- 2 digital TTL inputs with counter function
- 2 digital HTL inputs with counter function

The S-DIAS counter input module FC 021 provides the option to configure 2 counter inputs or one incremental encoder input. Thereby, the RS422, TTL or HTL inputs can be optionally used for the counter function. Parallel to the inputs, the module also provides the actual status of all digital inputs. The TTL and HTL inputs are galvanically separated on the S-DIAS bus. The sensor supply connected to X3 is also galvanically separated on the S-DIAS bus.

RS422 Digital Input Specifications

Number of channels	2
Input signals	RS422 signal (inputs: 330 Ω bus termination, 1.2 kΩ spread each against 5 volts and ground)
Input delay	0.025 μs
Input frequency	maximum of 5 MHz in normal counter mode or in incremental counter mode with 4-edge analysis
Counter frequency	5 MHz in normal counter mode 20 MHz in incremental counter mode with 4-edge analysis
Galvanic Isolation	no
Common mode range	-5 V ... +10 V
Status LEDs	yes

HTL Digital Input Specifications

Number	2	
Input voltage	typically +24 V	maximum +30 V
Signal level	low: < +8 V	high: > +14 V
Switching threshold	typically +11 V	
Input current	3.7 mA at +24 V	
Input delay	10 μs	
Input frequency	maximum of 25 kHz in normal counter mode or in incremental counter mode with 4-edge analysis	
Counter frequency	25 kHz in normal counter mode 100 kHz in incremental counter mode with 4-edge analysis	
Galvanic isolation	yes (isolation voltage 125 V)	

TTL Digital Input Specifications

Number	2	
Input voltage	typically 5.0 V	maximum 5.5 V
Signal level	low: 0.8 V	high: 2.0 V
Switching threshold	typically 1.4 V	
Input current	1.5 mA at +5 V	
Input delay	typically 1 μs	
Input frequency	maximum of 125 kHz in normal counter mode or in incremental counter mode with 4-edge analysis	
Counter frequency	125 kHz in normal counter mode 500 kHz in incremental counter mode with 4-edge analysis	
Galvanic isolation	yes (isolation voltage 125 V)	
Status LEDs	yes	