DIGITAL INDUSTRIES SOFTWARE

Simcenter Anovis Signal Recording Device in DIN-rail housing

Simcenter/AN-SRD-DIN-xCH-xx/2024/20240313

Product Information Sheet

Summary

The Simcenter Anovis Signal Recording Device (SRD) in DIN-rail housing is a state-of-the-art data acquisition system suited for the requirements of quality testing in industrial production. It is the standard signal recording hardware of the Simcenter Anovis Software.

The 35 mm x 7.5 mm top hat rail (DIN-rail) version is designed for space saving integration of a testing system with up to six signal channels. Four variants offer either two signal and two tacho channels (AN-SRD-DIN-2CH), four signal and four tacho channels (AN-SRD-DIN-4CH), six signal and two tacho channels (AN-SRD-DIN-6CH), or a combination of two signal/two tacho channels and four operating data channels (AN-SRD-DIN-2CH-OP).

BENEFITS

- Space-saving Signal Recording Device (SRD) for use in control cabinets: easy DIN-rail mounting, common 24 V/DC power supply
- Ethernet connection to system PC enable up to 50 m cable length for distributed system configurations

FEATURES

- Industrial grade components with extended temperature range for optimized reliability
- LED front-panel indicators for enhanced user feedback
- Three variants available with 2 or 4 signal channels plus 2 or 4 trigger/tacho channels, or 2 signal channels plus 2 trigger/tacho channels plus 4 operating data channels

AN-SRD-DIN-2CH

Simcenter Anovis SRD in DIN-rail housing with 2 signal channels plus 2 trigger/tacho channels.

AN-SRD-DIN-4CH

Simcenter Anovis SRD in DIN-rail housing with 4 signal channels plus 4 trigger/tacho channels.

AN-SRD-DIN-6CH

Simcenter Anovis SRD in DIN-rail housing with 6 signal channels plus 2 trigger/tacho channels.

AN-SRD-DIN-2CH-OPD

Simcenter Anovis SRD in DIN-rail housing with 2 signal channels plus 2 trigger/tacho channels and 4 operating data channels.

AN-SRD-DIN-4CH-LT

Simcenter Anovis SRD in DIN-rail housing with 4 signal channels

AN-SRD-DIN-8CH

Simcenter Anovis SRD in DIN-rail housing with 8 signal channels.

AN-SRD-DIN-4CH-OPD

Simcenter Anovis SRD in DIN-rail housing with 4 signal channels plus 4 operating data channels.

			
Product Code	AN-SRD-DIN-2CH	AN-SRD-DIN-4CH AN-SRD-DIN-6CH	AN-SRD-DIN-2CH-OPD
	2 channel Simcenter Anovis Signal Recording Device (SRD) in DIN-rail housing	4 / 6 channel Simcenter Anovis Signal Recording Device (SRD) in DIN-rail housing	2 channel Simcenter Anovis Signal Recording Device (SRD) in DIN-rail housing with 4 operational data channels
Technical Data			
Communication module			
	• Ethernet interface, 10/100 Mbit • UDP, TCP/IP, freely configurable • 24 V output; 5 V output (e. g. for light barrier) • 8 MByte real time memory		
Analog input			
Channels	2 synchronous channels – 24-bit sigma-delta converters	4 / 6 synchronous channels – 24-bit sigma-delta converters	2 synchronous channels – 24-bit sigma-delta converters
Input ranges	• SNR > 115 dB / 120 dB / 115 dB for input ranges: ±10 V, ±1 V, ±0.1 V and sample rate 6.4 kHz • SNR > 100 dB / 105 dB / 105 dB for input ranges: ±10 V, ±1 V, ±0.1 V and sample rate 51.2 kHz • SNR > 100 dB / 95 dB / 100 dB for input ranges: ±10 V, ±1 V, ±0.1 V and sample rate 102.4 kHz • SNR > 85 dB / 85 dB / 95 dB for input ranges: ±10 V, ±1 V, ±0.1 V and sample rate 192.2 kHz		
Coupling	• DC coupling • AC coupling with additional high pass filter 75 Hz, 150 Hz		
Sampling frequencies	3.2 kHz, 6.4 kHz, 12.8 kHz, 25.6 kHz, 38.4 kHz, 51.2 kHz, 76.8 kHz, 102.4 kHz, 153.6 kHz, 192 kHz		
Maximum bandwidth	75 kHz		
Supported sensors	• microphones, accelerometers, laser Doppler vibrometers, voltage • switchable ICP power supply +5 mA, signalized by LED • ICP error signalized by LED (sensor short connected, no sensor connected)		

Product Code	AN-SRD-DIN-2CH	AN-SRD-DIN-4CH AN-SRD-DIN-6CH	AN-SRD-DIN-2CH-OPD
Tacho Channels			
	2 channels – 10-bit resolution	4 / 2 channels – 10-bit resolution	2 channels – 10-bit resolution
	• input voltage range: 20 V_{pp} • input impedance 4.6 kΩ • DC coupling • low-pass filters 6 kHz, 150 kHz, 20 MHz • sampling frequency: 48 MHz • trigger level 10 bit – in the range of -42 V to +42 V • TTL output (3.5 mm jack) • falling edge, rising edge, falling and rising edge, displayed by LED • LED display: active, inactive, overclocked		
Operation data channels: • *Operation data are slowly varying measurement signals with a maximum bandwidth of 1 kHz, e. g. temperature, pressure.* • *For analysis and classification, the same algorithms as in Anovis-professional or Anovis-lite are applicable.*			
	not applicable	not applicable	• 4 channels – 12-bit resolution • input voltage ranges: ±1 V, ±10 V • input impedance: 33 kΩ • electric strength: 230 V AC (short-term) • DC coupling or high pass 20 Hz • sampling frequency: 2 kHz, bandwidth: 1 kHz • SNR > 60 dB • 1 LED display per channel: active, inactive, overclocked

Product Code	AN-SRD-DIN-2CH	AN-SRD-DIN-4CH AN-SRD-DIN-6CH	AN-SRD-DIN-2CH-OPD
Miscellaneous			
Power supply	24 V DC, typ. 600 mA	24 V DC, typ. 1000 mA	24 V DC, typ. 1000 mA
Environmental temperature	0 – 40 °C Maximum temperature inside of housing: 80 °C		
Protective class	IP 40		
Dimensions (width x height x depth)	110 mm x 105 mm x 220 mm		
Weight	approx. 1.4 kg	approx. 1.6 kg	approx. 1.6 kg
Remarks:			
	• free Ethernet port on PC required for connecting the SRD • Simcenter Anovis software license not included		
Deliverables:			
	Simcenter Anovis SRD in 35 mm x 7.5 mm top hat rail (DIN-rail) housing, equipped with one COM and one BAM module	Simcenter Anovis SRD in 35 mm x 7.5 mm top hat rail (DIN-rail) housing, equipped with one COM module and 4CH: two BAM modules 6CH: one BAM module + one SAM module	Simcenter Anovis SRD in 35 mm x 7.5 mm top hat rail (DIN-rail) housing, equipped with one COM, one BAM and one OPD module
	• 1 x Ethernet cable for connecting the Simcenter Anovis SRD to PC; length approx. 1.5 m • Technical documentation in English		

			
Product Code	AN-SRD-DIN-4CH-LT	AN-SRD-DIN-8CH	AN-SRD-DIN-4CH-OPD
	4 channel Simcenter Anovis Signal Recording Device (SRD) in DIN-rail housing	8 channel Simcenter Anovis Signal Recording Device (SRD) in DIN-rail housing	4 channel Simcenter Anovis Signal Recording Device (SRD) in DIN-rail housing with 4 operational data channels
Technical Data			
Communication module			
	• Ethernet interface, 10/100 Mbit • UDP, TCP/IP, freely configurable • 24 V output; 5 V output (e. g. for light barrier) • 8 MByte real time memory		
Analog input			
Channels	4 synchronous channels – 24-bit sigma-delta converters	8 synchronous channels – 24-bit sigma-delta converters	4 synchronous channels – 24-bit sigma-delta converters
Input ranges	• SNR > 115 dB / 120 dB / 115 dB for input ranges: ±10 V, ±1 V, ±0.1 V and sample rate 6.4 kHz • SNR > 100 dB / 105 dB / 105 dB for input ranges: ±10 V, ±1 V, ±0.1 V and sample rate 51.2 kHz • SNR > 100 dB / 95 dB / 100 dB for input ranges: ±10 V, ±1 V, ±0.1 V and sample rate 102.4 kHz • SNR > 85 dB / 85 dB / 95 dB for input ranges: ±10 V, ±1 V, ±0.1 V and sample rate 192.2 kHz		
Coupling	• DC coupling • AC coupling with additional high pass filter 75 Hz, 150 Hz		
Sampling frequencies	3.2 kHz, 6.4 kHz, 12.8 kHz, 25.6 kHz, 38.4 kHz, 51.2 kHz, 76.8 kHz, 102.4 kHz, 153.6 kHz, 192 kHz		
Maximum bandwidth	75 kHz		
Supported sensors	• microphones, accelerometers, laser Doppler vibrometers, voltage • switchable ICP power supply +5 mA, signalized by LED • ICP error signalized by LED (sensor short connected, no sensor connected)		

Product Code	AN-SRD-DIN-4CH-LT	AN-SRD-DIN-8CH	AN-SRD-DIN-4CH-OPD
Operation data channels: • *Operation data are slowly varying measurement signals with a maximum bandwidth of 1 kHz, e. g. temperature, pressure.* • *For analysis and classification, the same algorithms as in Anovis-professional or Anovis-lite are applicable.*			
	not applicable	not applicable	• 4 channels – 12-bit resolution • input voltage ranges: ±1 V, ±10 V • input impedance: 33 kΩ • electric strength: 230 V AC (short-term) • DC coupling or high pass 20 Hz • sampling frequency: 2 kHz, bandwidth: 1 kHz • SNR > 60 dB • 1 LED display per channel: active, inactive, overclocked
Miscellaneous			
Power supply	24 V DC, typ. 600 mA	24 V DC, typ. 900 mA	24 V DC, typ. 900 mA
Environmental temperature	0 – 40 °C Maximum temperature inside of housing: 80 °C		
Protective class	IP 40		
Dimensions (width x height x depth)	110 mm x 105 mm x 220 mm		
Weight	approx. 1.4 kg	approx. 1.6 kg	approx. 1.6 kg
Remarks:			
	• free Ethernet port on PC required for connecting the SRD • Simcenter Anovis software license not included		
Deliverables:			
	Simcenter Anovis SRD in 35 mm x 7.5 mm top hat rail (DIN-rail) housing, equipped with one COM and one SAM module	Simcenter Anovis SRD in 35 mm x 7.5 mm top hat rail (DIN-rail) housing, equipped with one COM module and two SAM modules	Simcenter Anovis SRD in 35 mm x 7.5 mm top hat rail (DIN-rail) housing, equipped with one COM, one SAM and one OPD module
	• 1 x Ethernet cable for connecting the Simcenter Anovis SRD to PC; length approx. 1.5 m • Technical documentation in English		