

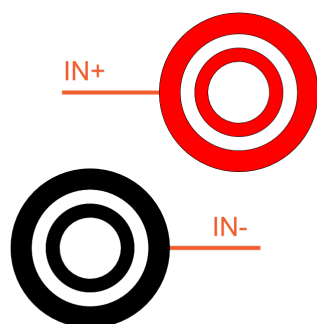
HS-HV

HV模块非常适合高速，高采样率，宽带高电压测量。

HS-HVv2:: 参数

输入				
输入类型	电压			
ADC类型	16-bit SAR			
通道采样率	1 MS/sec			
滤波器	100 kHz, 5th order Bessel			
通道带宽	2 MHz			
输入量程	±2000V, ±1000V, ±400V, ±200V, ±100V, ±50V, ±20V			
输入精度	信号频率	精度		
	DC	±0.03 % 读数±0.02 %量程 ±0.04 V		
	Up to1kHz	±0.03 %读数±0.02 % 量程		
	Up to10 kHz	±0.1% 读数 ±0.05 % 量程		
	Up to100 kHz	±2 % 读数 ±0.1% 量程		
	Up to 1000 kHz	±5 % 读数 ±0.5 % 量程		
本底噪声 典型值	带宽/量程 →	2000 V	400 V	100 V
	2 MHz	-83 dB	-79 dB	-71 dB
	100 kHz	-85 dB	-85 dB	-82 dB
	10 kHz	-100 dB	-97 dB	-90 dB
典型共模抑制比 @ 50 Hz / 1 kHz/ 10 kHz	85 dB / 75 dB / 50 dB			
增益漂移	典型值: 0 ppm/K, max. 40 ppm/K			
偏置漂移	典型值: 1 mV/K + 1 ppm 量程/K, max 2 mV/K + 5 ppm of 量程/K <0.02			
增益线性度	%			
通道串扰	-115 dB @ 50 Hz; -90 dB @ 1 kHz			
输入耦合	DC			
输入阻抗	10 MΩ 2 pF			
防护等级	CAT III 600 V; CAT II 1000 V			
过压保护	In+ to In-: 1.8 kVRMS, Inx to GND: 1.4 kVRMS			
其他参数				
输入接口	Banana			
TEDS支持	NA			
1) 50 V 量程(1.2 MHz) and 20 V量程 (700 kHz) 有带宽限制				

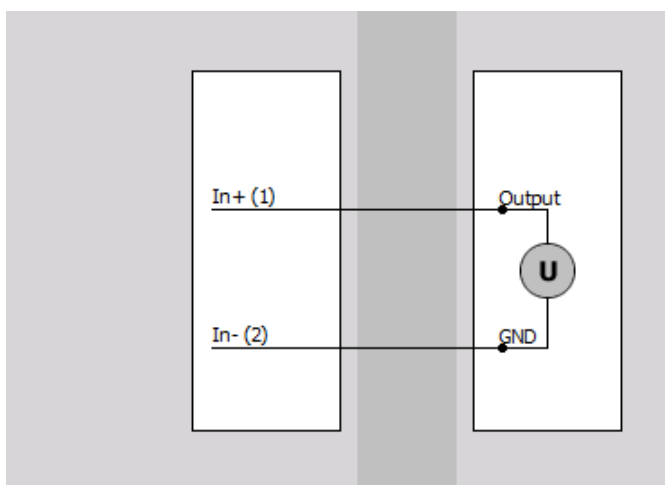
5.20.2. HS-HV



SIRIUSi-HS-8xHV

HS-HV connector: pin-out (Banana plug)

5.20.2.1. HS-HV: Voltage



HS-LV/HS-LV+

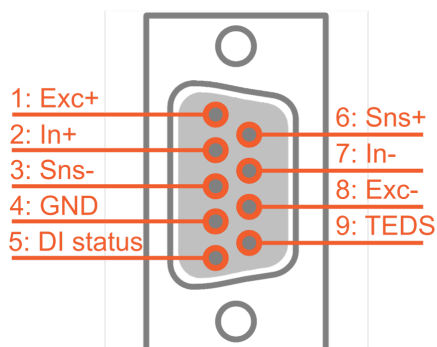
HS-LV模块是结合电流钳用于高速，高采样率，宽带低电压和电流测量的理想选择。

HS-LVv2：参数

输入				
输入类型	电压 全桥 电流（外部分流器）			
ADC 类型	16-bit SAR			
采样率	1 MS/sec			
滤波器	100 kHz, 5th order Bessel			
带宽	1 MHz (800 kHz for ranges ≤0.2 V)			
输入量程	±100, 50, 20, 10, 5, 2, 1, 0.5, 0.2, 0.1 and 0.05 Volt			
输入精度	信号频率	精度		
	DC	±0.03%读数 ±0.02%量程±100µV (2 mV 量程≥10 Volt)		
	Up to 1 kHz	±0.03 % 读数±0.02 % 量程		
	Up to 10 kHz Up	±0.1 %读数±0.05 % 量程		
	to 100 kHz Up to	±2 % 读数 ±0.1% 量程		
	1000 kHz	±5 %读数 ±0.5 %量程		
平衡放大器后 偏移精度	量程<10V: ±0.002%量程±3µV; 量程≥10V: ±0.005%量程			
本底噪声 典型值	带宽/量程→	100 V	5 V	0.5 V
	1 MHz	-85 dB	-86 dB	-78 dB
	100 kHz	-88 dB	-88 dB	-87 dB
	10 kHz	<-100 dB	<-100 dB	-95 dB
共模抑制比 典型值	带宽/量程→	100 V	5 V	0.5 V
	50 Hz	70 dB	88 dB	102 dB
	400 Hz	70 dB	86 dB	100 dB
	10 kHz	55 dB	70 dB	80 dB
增益漂移	典型: 10 ppm/K, max.: 30 ppm/K			
偏置漂移	典型: 0.3 µV/K+5 ppm of range/K, max : 2 µV/K + 10 ppm 量程/K			
增益线性度	<0.02 %			
通道间相位	0.02° * f _{in} [kHz] + 0.1° (5 V 量程)			
通道串扰	<10 V: -120 dB @ 10 kHz; 量程 ≥10 V: -95 dB @ 10 kHz			
输入耦合方式	DC, AC 1 Hz (3 Hz, 10 Hz per SW)			
输入阻抗	量程 <10 V: 10 MΩ; 量程 ≥10 V: 1 MΩ 110 pF between IN _x to GND			
通道共模电压	隔离版本: ±500 V			
	差分版本: 量程 ≥10 Volt: ±100 V; 其他量程 ±12 V			
过压保护	<10 V: 100 V (200 V peak for 10 msec); Range ≥10 V: 300 V cont.			

激励电压	
激励电压	可选单极性或双极性软件程控 (16-bit DAC)
激励能力	单极: 0...24 Volt; 预设值: 1, 2.5, 5, 10, 12, 15, 20 and 24 VDC
激励能力	双极: 2...30 Volt; 预设值: 2.5, 5, 10, 12, 15, 24 and 30 VDC
精度	$\pm 0.1\%$ ± 5 mV
漂移	± 50 ppm/K ± 100 μ V/K
稳定性10%至90% 负载 (双极)	$<0.01\%$
电流限制	200 mA (2 Watt max.每通道, 12 Watt max. 每个模块)
保护	连续对地短路
输入短路, 传感器偏移调整	软件选择
计数器(only on HS-LV+)	
输入	1 计数器输入 3 数字量输入 与模拟通道完全同步
Counter modes	计数, 波形定时, 编码器, 转速计, 齿轮传感器
General Counter Specifications	See "SIRIUS counter specification"
其他参数	
输入接头	DSUB-9, Banana, BNC (others on request)
TEDS 支持	Standard + DSI® adapters
1) In-必须以 ± 10 V为基准, 以GND (iso) 为基准; 对于范围 ≥ 10 V的情况, 不会拒绝In-的DC值	

5.21.2. HS-LV



HS-LV connector: pin-out (DSUB-9 female)



SIRIUSi-HS-8xLV



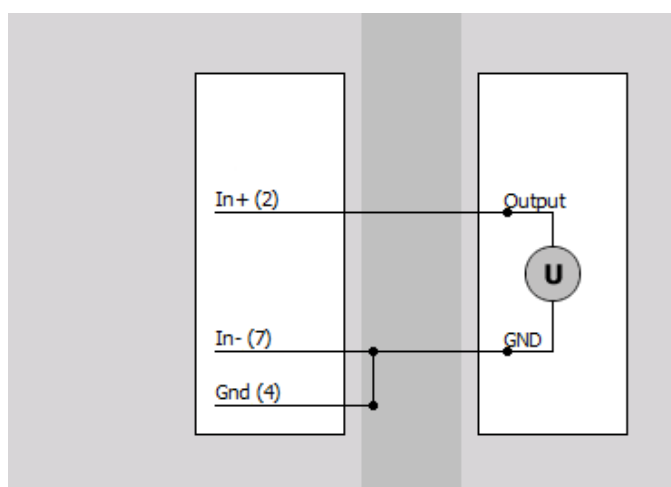
Important

Digital status input

Pin 5: DI Status is used for digital status input: i.e. show alarm status in DEWESoft® when a current clamp is open. See "[Accessories and Sensors Technical Reference Manual](#)"!

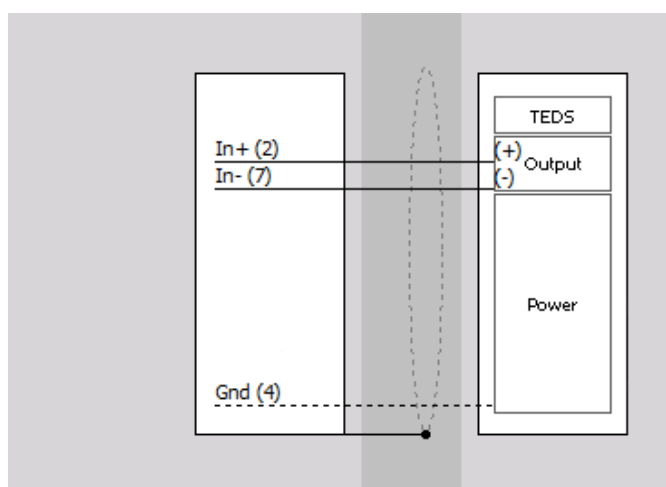
5.21.2.1. HS-LV: Voltage

Voltage - Single ended



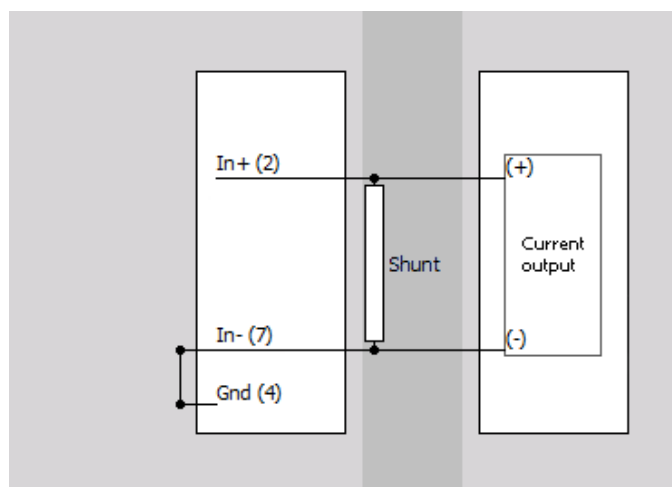
Voltage - Differential

Use only when sensor Output (+) and Output (-) are referenced to Gnd. Gnd must be connected.

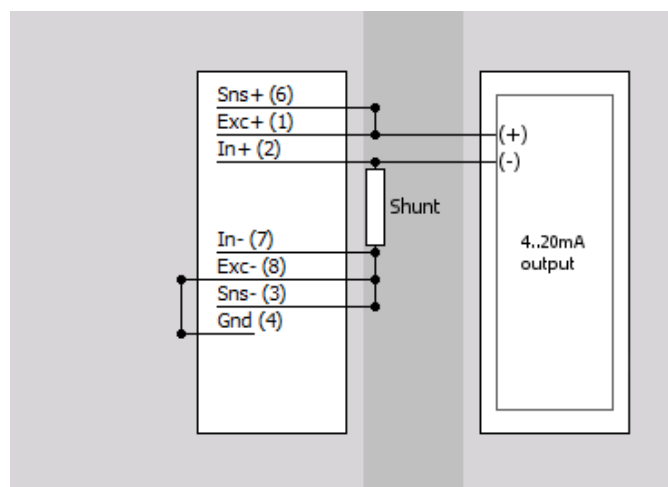


5.21.2.2. HS-LV: Current

External direct shunt

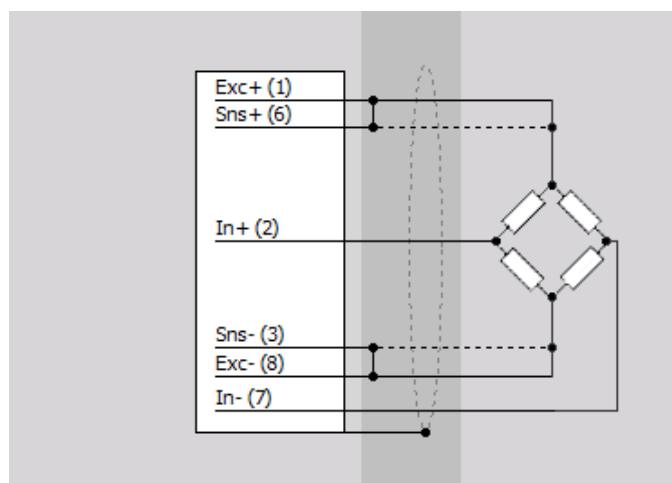


External loop powered shunt

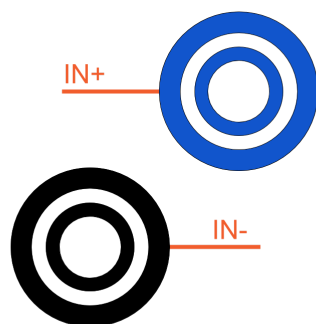


5.21.2.3. HS-LV: Bridge

Full Bridge



5.21.3. HS-LV-BAN

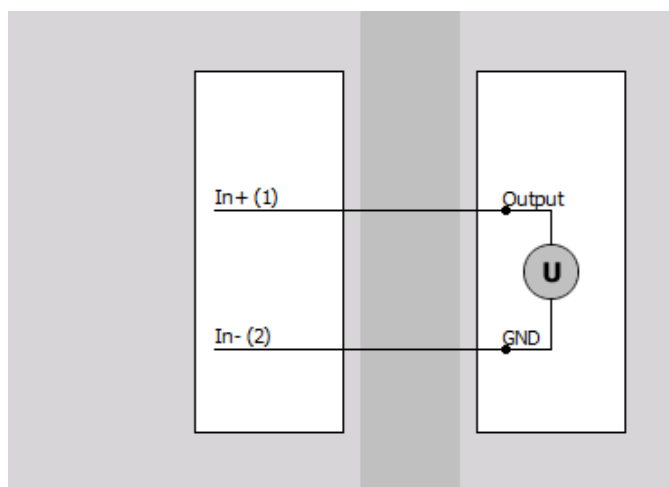


SIRIUSi-HS-8xLV-BAN

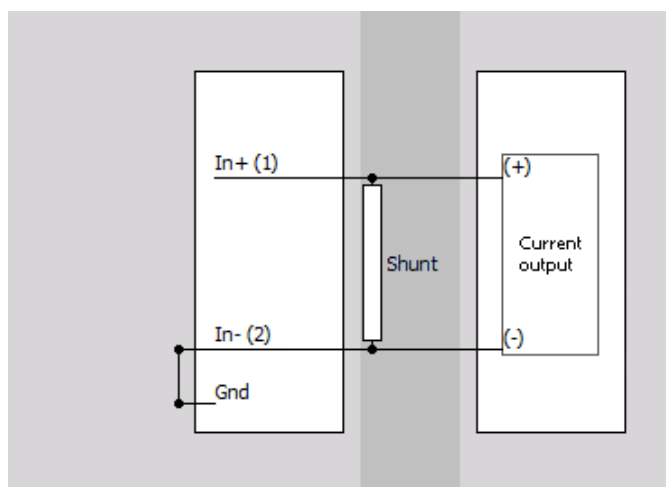
HS-LV-BAN connector: pin-out (Banana plug)

5.21.3.1. HS-LV-BAN: Voltage, Current

Voltage



Current



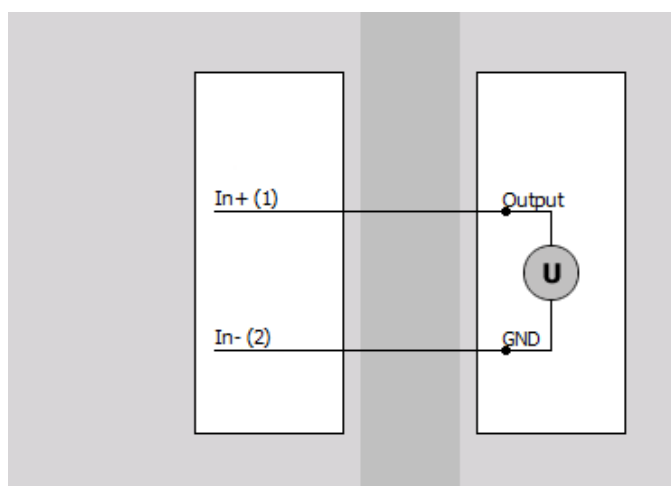
5.21.4. HS-LV-BNC



HS-LV-BNC connector: pin-out (BNC)

5.21.4.1. HS-LV-BNC: Voltage, Current

Voltage



Current

