

Charge and IEPE Conditioner Card Selection Guide



Card	28304	28324	28314	28316C	28302B-FX02
Type	Single-ended (SE) Charge, IEPE (GND or ISO) w/ Long Distance TEDS	Single-ended (SE) Charge, IEPE (GND or ISO) w/ Long Distance TEDS	Single-ended Dynamic or Quasi-static Charge (GND or ISO) w/ Long Distance TEDS	IEPE (GND or ISO) w/ Long Distance TEDS	Single-ended or Differential Charge, IEPE or Velocity Coil Input
Channels/Card	4	4	4	16	2
Channels/System	64	64	64	256	32
Applicable Transducer	Piezoelectric or IEPE sensor, remote charge converter, AC voltage	Piezoelectric or IEPE sensor, remote charge converter, AC voltage	Dynamic measurement for shock and vibration, quasi-static load or pressure sensor	IEPE sensor with TEDS (Optional, AC voltage)	Piezoelectric or IEPE sensor, velocity coil, AC voltage
Interface	2-wire coaxial on Combo-D	2-wire coaxial on Combo-D	2-wire coaxial on Combo-D	2-wire w/ shield	Charge: 3-pin LEMO or Twinaxial BNC IEPE: 3-pin LEMO or Coaxial BNC
Excitation	IEPE Current: 0, 4, 8, 12 mA	IEPE Current: 0, 4, 8, 12 mA	IEPE Current: 0-25 mA in 1 mA steps	IEPE Current: 0, 2, 4, 8 mA	IEPE Current: 8.5 mA
Bandwidth	0.25 Hz to 450 kHz	0.5 Hz to 170 kHz	500 kHz (low-frequency time constant up to 50K seconds)	0.25 Hz to 140 kHz	0.3 Hz to 20 kHz
Gain	x1/16 to x8192 w/ 0.05% resolution	x1/16 to x1024 w/ 0.05% resolution	x1/16 to x8192 w/ 0.05% resolution	x1 to x512 w/ 0.1% resolution	Piezoelectric: 1 to 200 pC/g IEPE: 0.1 to 200 mV/g (10 mV/g out)

Card	28304	28324	28314	28316C	28302B-FX02
Filter	4-Pole Flat/ Pulse Low-Pass w/ optional REZCOMP; 8-Pole Flat/Pulse Low- Pass or 8-Pole Band-Pass	4-Pole Flat/Pulse Low-Pass	4-Pole Flat/Pulse Low-Pass or 8-pole Flat/Pulse Low-Pass	4-Pole Flat/Pulse, Time Delay, or Butterworth Low-Pass	6-Pole Butterworth High-Pass, 6-Pole Elliptic Low-Pass
Cutoff Frequencies	Flat: 2 Hz to 204.6 kHz Pulse: 1 Hz to 102.3 kHz	FX02: 300 Hz, 1 kHz, 3 kHz, 10 kHz, 30 kHz FX03: 10 kHz, 20 kHz, 40 kHz, 80 kHz, 100 kHz	Flat: 2 Hz to 204.6 kHz Pulse: 1 Hz to 102.3 kHz	FX01: 100 Hz, 300 Hz, 1 kHz, 3 kHz, 10 kHz, Bypass FX02: 300 Hz, 1 kHz, 3 kHz, 10 kHz, 30 kHz, Bypass	HP: 0.3 Hz, 3 Hz, 10 Hz, 30 Hz, 100 Hz LP: 50 Hz to 12.75 kHz in 50 Hz steps
Outputs	Buffered single- ended (SE) outputs (2 per channel)	Buffered single- ended (SE) outputs (2 per channel)	Buffered single- ended (SE) outputs (2 per channel)	Buffered single- ended (SE) outputs (2 per channel)	2 acceleration, 2 velocity, 1 displacement, 1 DC, 1 alarm