

Product Specifications

Number of recording channels		0
Number of outputs (channels)		2 to 32
Output type		Constant current
Number of independent electrodes		32
Charge balancing method		Active (Programmable balancing pulse (Ratio of 1, 2,4 or 8)
Amplitude range, current (mA)		0 to 25.4 mA
Amplitude resolution, current (mA)		100uA
Amplitude range, voltage (V)		6V – 18V (Vstim=15.24 V max)
Amplitude resolution, voltage (V)		N/A for Constant Current
Pulse width range (micro-s)		20 to 1000 us
Pulse width resolution (micro-s)		10 uS
Pulse frequency range (Hz)		1-14285 Hz
Pulse frequency resolution (Hz)		Variable from 1 Hz at low end to >1kHz at high end
Voltage compliance		~1V (2.76 V)
Modulation modes	Off	Yes
	Continuous	Yes
	Cycle on/off	Programmable via microcontroller
	Ramp up	Programmable via microcontroller
	Scheduled	Programmable via microcontroller
	Burst	Phases of Stim pulses may be modulated with minor widths down to 10uS
	Scheduled	Programmable via microcontroller
Power delivered to stim electrodes (mW, ave, highest expected settings)		Single electrode pair: 12.7mA, 15.24V -> 193mW
Autonomous operational time (between charges) or replacement		Depends on stimulation parameters (few hours to weeks)
Recharge time (if applicable)		4 to 5 hrs
Standby power consumption		Depends on tasks being performed during standby
Current power source		3.7V 215mAh zero volt rechargeable
Multiple programs across electrodes		yes, electrodes independent
Multiple programs across sequence		Yes, stim pulse profiles A through D
Phase delay between channels		Programmable, >20uS
Enclosure height (mm)		48.6 mm
Enclosure length (mm)		38.1 mm
Enclosure thickness (mm)		10.5 mm
Weight (g)		30 gm
Volume (cc)		15.4-17.5cc
Can Wall Thickness (mm)		Front: 0.2 / Back: 0.3
Interconnect		Balseal (Pitch: 2.01 mm)
IPG Port ID (mm)		1.1
IPG Port Contact Pitch (mm)		1.96
Telemetry protocol		MICS/Bluetooth
Impedance measurement capable?		Via individual voltage measurement across two stim channels
Real time clock		Yes, no backup
Real-time IPG / External Communication		MICS

Solace R&D Platform

Product Specifications (con't)

Miscellaneous

PRC Battery Capacity	1400 mAh
PRC Weight	75 gm
PRC Dimensions H x W x D (mm)	83 x 51 x 19
Bluetooth Std. Version	4
TPG Battery Capacity	1400 mAh
TPG Weight	82 gm
TPG Dimensions H x W x D (mm)	95 x 53 x 21
CHG Battery Capacity	3350 mAh
CHG Weight	146 gm
CHG Dimensions H x W x D (mm)	77 x 90 x 24.6
IPG MSP	MSP430F5328 Flash 128 KB SRAM 10 KB
IPG Battery Dimensions H x W x D (mm)	31.24 x 21.84 x 4.95

