



# **DIGITEL SPC<sub>NEG</sub>** NEG pump controller

# DIGITEL SPC<sub>NEG</sub> NEG pump controller

## The most convenient single NEG controller

Creating ultra-high vacuum is a huge challenge, no matter the type of application. Analytical instruments, accelerators for medical treatment, fundamental physics research, electron microscopes, and a broad spectrum of various experiments require pressure levels that demand intense preparations. Many components need to be considered in complex systems, so the less worries the better.

GAMMA's new DIGITEL SPC<sub>NEG</sub> controller serves this purpose. It operates NEG pumps with a high pumping speed for hydrogen, which is the most relevant gas type in ultra-high vacuum. Unlike standard power supplies, the SPC<sub>NEG</sub> can not only push a current into the NEG's heater, but uses pre-defined routines, with certain parameters, such as current

values or heating duration. Those values are chosen by the SPC<sub>NEG</sub> depending on the connected NEG pump. The routines are customizable to allow for experiments with different parameters. Reliable operation is accomplished by open-loop detection as well as overload protection.

A high ease of use is established by a large touch screen. In addition, the ethernet interface allows for remote control. The new DIGITEL SPC<sub>NEG</sub> is a milestone in GAMMA's product portfolio: A modern NEG controller in a compact design, optimized in both performance and cost with increased functionality that helps to reach ultra-high vacuum more conveniently for your application.



### Ease of use

- Pre-defined routines
- Bright color touch panel
- Intuitive operation



### Communications

Ethernet is the standard interface for the SPC<sub>NEG</sub>. It is used for

- Software updates
- Data logging
- Remote control



### Operation

The DIGITEL SPC<sub>NEG</sub> activates, conditions or regenerates all of GAMMA's NEG pumps as well as any NEG pump on the market with a pumping speed of up to 400 l/s.



## Features

Adjustable timer for customized powering of the connected NEG pump

Sensing of open connection to NEG pump

Touch screen with wide angle of view of the display

Adjustable current



Selectable NEG pump size with pre-programmed routines for activation, conditioning or regeneration for a high ease of use. Interlock if no pump size is selected or verified

Power capable for all NEG pumps on the market up to 400 l/s

The compact design is based on the proven SPC platform which is GAMMA's renowned ion pump controller

Remote control, data logging and software updates via Ethernet



One power output to NEG pump

Universal 90-240 V power input

# TECHNICAL SPECIFICATIONS

<b>Input power</b>	
Voltage	90-240 VAC
Frequency	48-62 Hz
<b>Output power</b>	
Independent outputs	1
Open circuit voltage	0-27 VDC
Current (maximum)	10 A
Watts (maximum)	270 W
Resolution	10 mA
<b>Voltage connections</b>	Fischer Type 105
<b>Display</b>	
Type	320 x 240 Touchscreen with backlight
Readout	Power, current, and programmable options
<b>Communications</b>	Ethernet
<b>Conformity to norms</b>	EN 55011 Class A, IEC 801-2, EN 801-3, IEC 801-4, EN 61010-1
<b>Weight, kg (lbs)</b>	2.0 (4.5)
<b>Size</b>	2U high, 1/4 rack wide, 11.3 in. deep, H82 x W110 x D288 (mm)

Ordering part number	Description
SPCNSU1E	DIGITEL SPC-NEG, Ethernet, 110 V, US
SPCNSU2E	DIGITEL SPC-NEG, Ethernet, 220 V, US
SPCNSE2E	DIGITEL SPC-NEG, Ethernet, 230 V, EC
SPCNSK2E	DIGITEL SPC-NEG, Ethernet, 230 V, UK
SPCNSA2E	DIGITEL SPC-NEG, Ethernet, 230 V, AU
FI4S1MSS	Cable SPC-NEG, 1m, small connector (suitable for 50NP - 400NP)
FI4S3MSS	Cable SPC-NEG, 3m, small connector (suitable for 50NP - 400NP)
FI4S6MSS	Cable SPC-NEG, 6m, small connector (suitable for 50NP - 400NP)
FI4S1MSL	Cable SPC-NEG, 1m, large connector (suitable for 410NP)
FI4S3MSL	Cable SPC-NEG, 3m, large connector (suitable for 410NP)
FI4S6MSL	Cable SPC-NEG, 6m, large connector (suitable for 410NP)



2700 4th Ave E, Ste 100, Shakopee, MN 55379

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