

# Product Change Notification

**PCN Number: 1011-00**

**Title:** XFlow 30 Product Replacement

**PCN Publish Date:** January 8, 2013

**Effective Date:** February 28, 2013

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**PCN Type:** ("X" Appropriate PCN Type)

Discontinuance

Labeling

Product Revision

Other

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## Description of Change:

The XFlow 30 Chip Cooler 25W Standard and XFlow 30 Chip Cooler High Performance 40W are being replaced with a new XFlow 30 L50-50 Electronics Cooler. The current versions will be discontinued.



Figure 1. Product image of the XFlow 30 SynJet.

## Customer Impact from Change:

The part numbers in the "Part Numbers Affected Section" will be discontinued. An identical form factor replacement XFlow 30 L50-50 Electronics Cooler will be available in April 2013. One new SynJet cooler will replace both the XFlow 30 Standard Performance and the XFlow 30 High Performance SynJets currently available. The new product has an identical mechanical form factor. All mounting and size dimensions are identical to the existing products. The key specification

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changes are shown in the table below. The specification sheet for the new XFlow 30 L50-50 Electronics Cooler is at the end of this PCN.

	Theta (°C/W)	Acoustics (dBA)	Power (mW)
Current XFlow 30 Standard Performance 12V	1.63	25	550
New XFlow 30 L50-50 12V	1.33	25	680
	0.30 Lower	No Change	130 mW Increase
Current XFlow 30 Standard Performance 5V	1.63	25	350
New XFlow 30 L50-50 5V	1.33	25	540
	0.30 Lower	No Change	190 mW Increase
Current XFlow 30 High Performance 12V	1.10	38	1400
New XFlow 30 L50-50 12V	1.10	31	1200
	No Change	7 dBA Lower	200 mW Decrease
Current XFlow 30 High Performance 5V	1.10	38	1200
New XFlow 30 L50-50 5V	1.10	31	950
	No Change	7 dBA Lower	250 mW Decrease

**Last Order Date (for Discontinuance only):**

A last time buy option is available. All orders must be placed by February 28, 2013 with delivery by July 31, 2013. Orders placed after February 28, 2013 will be filled with current products if inventory is available. If inventory on the current products is not available, these orders can be filled with new parts.

**Part Numbers Affected:**

Current Part Number	Description	Replacement Part Number	Description
SSCCS-IM005-003	SynJet, XFlow 30, Standard, 5V, PWM, Black	NX203100	SynJet, XFlow 30, 5V, PWM
SSCCS-IM012-002	SynJet, XFlow 30, Standard, 12V, PWM, Black	NX203101	SynJet, XFlow 30, 12V, PWM
SSCCS-IM005-002	SynJet, XFlow 30, High Performance, 5V, PWM, Black	NX203100	SynJet, XFlow 30, 5V, PWM
SSCCS-IM012-001	SynJet, XFlow 30, High Performance, 12V, PWM, Black	NX203101	SynJet, XFlow 30, 12V, PWM

*For questions or additional information please contact your local sales representative. Local sales contacts can be found on [www.Nuventix.com](http://www.Nuventix.com).*

# SynJet<sup>®</sup> XFlow 30 L50-50 Electronics Cooler

## Specifications<sup>1</sup>

### Thermal & Acoustic

SynJet Setting	$\Theta_{s-a}^2$	TDP <sup>3</sup> (W)	SPL (dBA) <sup>4</sup>	Wire Connections
PWM at 100% duty cycle	1.1	36	31	Red to +VDC Black to Ground
				Red to +VDC Black to Ground Blue to PWM Signal

### Electrical

SynJet Setting <sup>2</sup>	Voltage (VDC) +/- 10%	Current (mA) <sup>5</sup>			Pavg (mW)	Voltage (VDC) +/- 10%	Current (mA) <sup>6</sup>			Pavg (mW)
		Imin	Iavg	Ipeak			Imin	Iavg	Ipeak	
PWM at 100% duty cycle	5	20	190	380	950	12	10	100	200	1200

### Environmental

All Settings	Min	Max	Units	Conditions
Operating Temperature	-40	85	°C	Air temperature surrounding cooler
Storage Temperature	-50	95	°C	Air temperature surrounding cooler
Storage Altitude		15K	m	Above sea level
Operating Relative Humidity	5	95	%	Non-condensing
Weight		125	g	SynJet with heat sink
Reliability		100K	hrs	L10 @ 60°C
Regulatory Compliance				RoHS, UL, FCC Part 15 Class B, CE

(continued on next page)

<sup>1</sup> All values are typical at 25°C unless otherwise stated.

<sup>2</sup> Thermal resistance values are given as reference only and are measured in free air without airflow obstructions. Thermal resistance is measured from the bottom middle of the heat sink to ambient air measured at the inlet to the SynJet, with a heat source at least 15cm<sup>2</sup> using the reference heat sink. Actual thermal performance may vary by application and final product design should be tested to assure proper thermal performance.

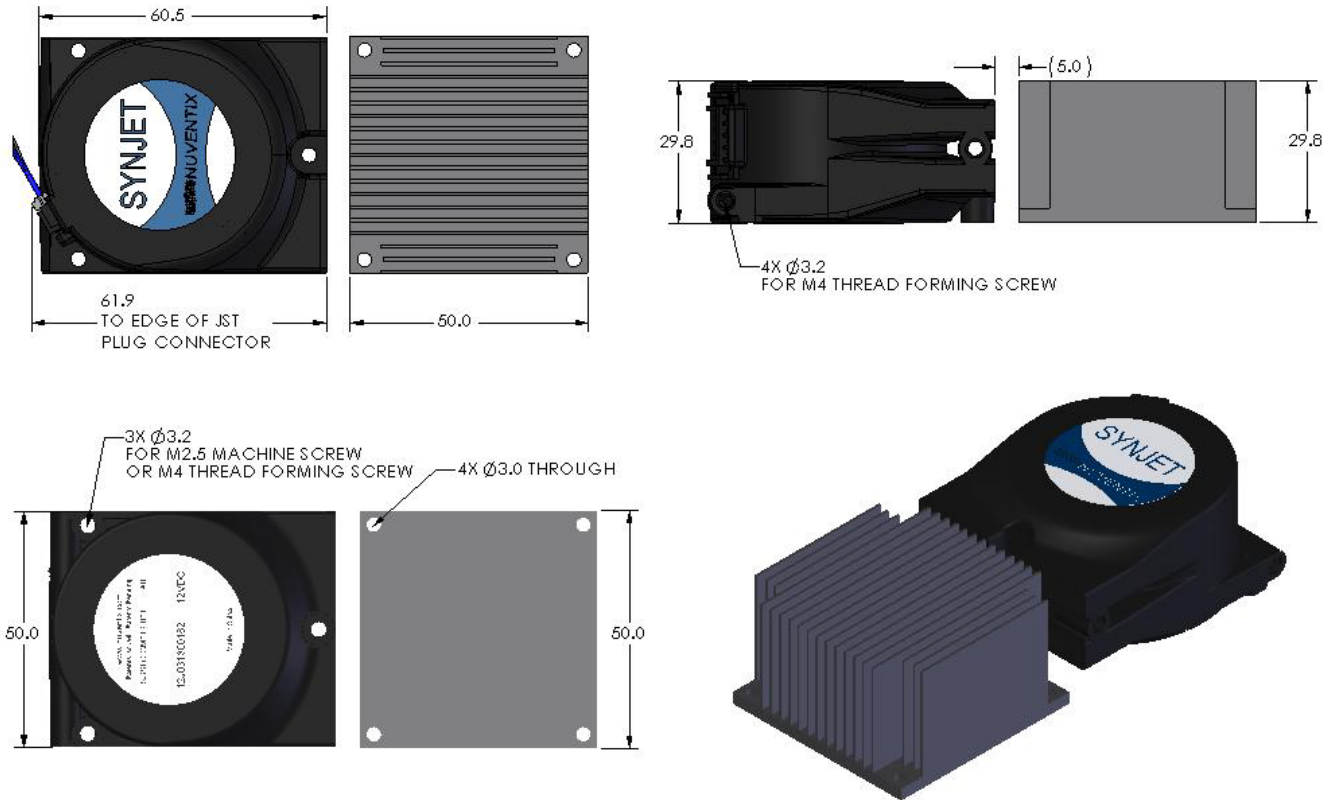
<sup>3</sup> Thermal Design Power is based on a 40°C temperature rise of heat sink mounting surface above ambient temperature around cooler.

<sup>4</sup> Sound Pressure Level is measured at 1 meter distance per ISO 7779.

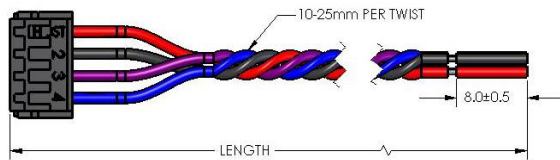
<sup>5</sup> The SynJet has a time varying current. The current waveform is sinusoidal and the average current (Iavg) is used to calculate the average power consumption (Pavg) at nominal input voltage (VDC). See the Electrical section in the Product Design Guide for a detailed explanation.

## Mechanical

All dimensions are nominal and in mm unless otherwise stated. See product drawings for more detail.



### SynJet Wire Harness



### Connector Pinout

Pin	Wire Color	Symbol	Description
1	Red	+VDC	5 V or 12 V depending on model
2	Black	GND	Ground
3	Purple	CTRL2	Status signal for PWM model
4	Blue	CTRL1	PWM input for PWM model

**IMPORTANT:** SynJets should be completely wired to the power supply before the power supply is energized. The power supply should be turned off before the SynJet Cooler is disconnected. SynJet Coolers are not designed for “hot swap” or “hot plug” applications.

### Part Numbers

Part Number	Description	Notes
NX203100	SynJet, XFlow 30, 5V, PWM	Use PWM input to control performance setting
NX203101	SynJet, XFlow 30, 12V, PWM	Use PWM input to control performance setting
HSCCS-CALBL-001	Heat Sink, L50-50, Al, Black	Mounting surface does not have mounting holes
WALLS-C4150-001	Wire Harness, 4-Wire, 150 mm Length	Contact sales for other lengths
WALLS-C4600-001	Wire Harness, 4-Wire, 600 mm Length	Contact sales for other lengths

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