

# NETWORK-1 SECURITY SOLUTIONS, INC.

Filed Pursuant to Rule 424(b)(3)  
Registration No. 333-143710

## **PROSPECTUS SUPPLEMENT NO. 3** (To Prospectus dated April 10, 2012)

This is a prospectus supplement to our prospectus dated April 10, 2012 (the "Prospectus") relating to the resale from time to time by selling stockholders of up to 5,904,897 shares of our common stock, including shares issuable upon exercise of outstanding warrants and options. The purpose of this Prospectus Supplement is to update the "Selling Stockholders" and "Use of Proceeds" sections of the Prospectus to reflect (i) the expiration of the exercise period of certain warrants to purchase an aggregate of 2,021,627 shares of our common stock which were issued to investors and placement agent assignees with respect to our private offering completed on April 16, 2007 and (ii) the exercise on April 15, 2012 by our Chief Executive Officer of options to purchase 732,709 shares of our common stock. Accordingly, the number of shares subject to resale by selling stockholders covered by the Prospectus has been reduced by 2,021,627 shares from 5,904,897 to 3,883,270 shares of our common stock, including shares issuable upon exercise of outstanding options and warrants.

This prospectus supplement should be read in conjunction with the Prospectus and may not be delivered or utilized without the Prospectus. This prospectus supplement is qualified by reference to the Prospectus, except to the extent that the information provided by this prospectus supplement supersedes the information contained in the Prospectus.

The securities offered by the Prospectus involve a high degree of risk. You should carefully consider the "Risk Factors" referenced on pages 6-13 of the Prospectus in determining whether to purchase the common stock.

The date of this prospectus supplement is May 31, 2012.

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## SELLING STOCKHOLDERS

The information appearing under the caption "Selling Stockholders" beginning on page 26 of the Prospectus is amended and restated in its entirety to reflect the following:

The following table sets forth the names of the selling stockholders who may sell their shares under this Prospectus from time to time. The selling stockholders are not obligated to sell any of the shares offered by this Prospectus. The number of shares sold by each selling stockholder may depend on a number of factors, such as the market price of our common stock.

We are registering 3,883,270 shares of our common stock for resale by the selling stockholders. We agreed to file a registration statement under the Securities Act of 1933, as amended (the "Securities Act") with the Securities and Exchange Commission, of which this Prospectus is a part, with respect to the resale of:

- 133,333 shares of common stock issued to an investor in our private offering completed on April 16, 2007;
- 2,749,937 shares of common stock and 1,000,000 shares of common stock issuable upon exercise of warrants and options owned by our Chairman and Chief Executive Officer and related parties;

The number of shares of our common stock shown in the following table as being offered by the selling stockholders do not include such presently indeterminate number of additional shares of our common stock that may be issuable as a result of stock splits, stock dividends and similar transactions. Pursuant to Rule 416 under the Securities Act, however, such shares are included in the Registration Statement of which this Prospectus is a part.

The selling stockholders may sell any or all of their shares listed below from time to time. Accordingly, we cannot estimate how many shares the selling stockholders will own upon consummation of any such sales. Also, the selling stockholders may have sold, transferred or otherwise disposed of all or a portion of their shares since the date on which the information was provided in transactions exempt from the registration requirements of the Securities Act.

Of the selling stockholders listed in the table below, Steven Heinemann is believed by us to be an affiliate of a broker-dealer, who purchased the securities in the ordinary course of business and at the time of the purchase of the securities to be resold, such selling stockholder did not have any agreements or understandings, directly or indirectly, with any person to distribute the securities.

None of the selling stockholders has had a material relationship with us within the past three years other than as a result of the ownership of our securities except Corey M. Horowitz is our Chairman, Chief Executive Officer and Chairman of our Board of Directors.

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<b>Name</b>	<b>Number of Shares Beneficially Owned Prior to Offering(1)</b>	<b>Number of Shares Being Offered</b>	<b>Number of Shares Beneficially Owned After Offering(1)(2)</b>	<b>Percentage of Outstanding Common Stock After Offering(1)</b>
Corey M. Horowitz	8,459,064 (3)	3,749,937 (4)	4,709,127	16.5%
CMH Capital Management Corp.	2,171,372 (5)	2,171,372 (5)	0	0%
Donna Slavitt	67,471	67,471	0	0%
Logan Zev Horowitz 1999 Trust	107,500 (6)	107,500 (6)	0	0%
Dylan Max Horowitz 1999 Trust	107,500 (6)	107,500 (6)	0	0%
Corey M. Horowitz Custodian for Zachary Jordon Horowitz	107,500 (6)	107,500 (6)	0	0%
Horowitz Partners	2,291 (7)	2,291 (7)	0	0%
Steven D. Heinemann	2,578,385	133,333	2,445,052	9.4%

- (1) Except as otherwise indicated, the address for each beneficial owner is c/o Network-1 Security Solutions, Inc., 445 Park Avenue, Suite 1020, New York, New York 10022.
- (2) Unless otherwise indicated, we believe that all persons named in the above table have sole voting and investment power with respect to all shares of common stock beneficially owned by them. A person is deemed to be the beneficial owner of securities that can be acquired by such person within 60 days from the date hereof upon the exercise of options, warrants or convertible securities. Each beneficial owner's percentage ownership is determined by assuming that options, warrants and convertible securities held by such person (but not those held by any other person) and which are exercisable or convertible within 60 days have been exercised and converted. Assumes a base of 25,977,563 shares of common stock outstanding.
- (3) Includes (i) 2,247,930 shares of common stock held by Mr. Horowitz, (ii) 3,397,500 shares of common stock subject to currently exercisable stock options held by Mr. Horowitz, (iii) 2,171,372 shares of common stock held by CMH Capital Management Corp. ("CMH"), an entity in which Mr. Horowitz is the sole shareholder, officer and director; (iv) 250,000 shares of common stock subject to currently exercisable warrants held by Mr. Horowitz, (v) 67,471 shares of common stock owned by Donna Slavitt, the wife of Mr. Horowitz, (vi) an aggregate of 322,500 shares of common stock held by two trusts and a custodian account for the benefit of Mr. Horowitz's three children and (vii) 2,291 shares of common stock held by Horowitz Partners, a general partnership of which Mr. Horowitz is a partner.
- (4) Includes (i) 186,303 shares of common stock held by Mr. Horowitz, (ii) 2,171,372 shares of common stock held by CMH, (iii) 250,000 shares of common stock subject to currently exercisable warrants held by Mr. Horowitz (iv) 750,000 shares of common stock subject to currently exercisable options held by Mr. Horowitz, (v) 67,471 shares of common stock owned by Donna Slavitt, the wife of Mr. Horowitz, (vi) an aggregate of 322,500 shares of common stock held by two trusts and a custodian account for the benefit of Mr. Horowitz's three children and (vii) 2,291 shares of common stock held by Horowitz Partners, a general partnership of which Mr. Horowitz is a partner.
- (5) Includes 2,171,372 shares of common stock. Corey M. Horowitz, by virtue of being the sole officer and shareholder of CMH, has sole power to vote and dispose of the shares of common stock owned by CMH.
- (6) Gary Horowitz, by virtue of being the trustee of the Logan Zev Horowitz 1999 Trust and the Dylan Max Horowitz 1999 Trust, has sole power to vote and dispose of the shares of common stock owned by each of the trusts. Corey M. Horowitz, by virtue of being custodian for Zachary Jordon Horowitz, has the sole power to vote and dispose of such shares.
- (7) Corey M. Horowitz, Gary Horowitz, Cindy Horowitz and Syd Horowitz, by virtue of being a general partner of Horowitz Partners, may each be deemed to have shared power to vote and dispose of the shares owned by Horowitz Partners.
- (8) Includes 2,578,385 shares of common stock based on a Form 4 filed by Mr. Heinemann with the Securities and Exchange Commission on June 13, 2011.

## **USE OF PROCEEDS**

The information appearing under the caption "Use of Proceeds" beginning on page 26 of the Prospectus is amended and restated in its entirety to reflect the following:

We will not receive any proceeds from the sale of the shares of our common stock by the selling stockholders. All proceeds from the sale of such shares will be for the accounts of the selling stockholders. We will receive proceeds from the exercise of the warrants and options held by the selling stockholders for the 1,000,000 shares included in this Prospectus that underlie those options and warrants and exercised by the payment of cash. If the options and warrants to purchase all those shares are exercised for cash, we would receive proceeds of approximately \$680,000. Cash proceeds that we may receive upon exercise of the warrants and options will be used for working capital purposes.