

NOVA MEASURING INSTRUMENTS LTD
Form 6-K
April 25, 2006

FORM 6-K
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549
Report of Foreign Private Issuer
Pursuant to Rule 13a-16 or 15d-16
of the Securities Exchange Act of 1934

Date of Report: April 25 2006
Commission File No.: 000-30688

NOVA MEASURING INSTRUMENTS LTD.

Building 22 Weitzmann Science Park, Rehovoth
P.O.B 266

Indicate by check mark whether the registrant files or will file
annual reports under cover Form 20-F or Form 40-F.

Form 20-F Form 40-F

Indicate by check mark whether the registrant by furnishing the information contained
in this Form is also thereby furnishing the information to the Commission pursuant to
12g3-2(b) under the
Securities Exchange Act of 1934.

Yes No

If Yes is marked, indicate below the file number assigned to the registrant in
connection with 12g3-2(b): N/A.

Attached hereto and incorporated herein by reference are Exhibits 99.1 and 99.2, the Registrant's press release and a summary of certain material terms of the Asset Purchase Agreement among the Registrant, HyperNex, Inc. and its shareholders.

This report on Form 6-K is hereby incorporated by reference into the registration statements on Form S-8 filed by Nova Measuring Instruments Ltd., filed with the Securities and Exchange Commission on the following dates: September 13, 2000 (File No. 333-12546); March 5, 2002 (File No. 333-83734); December 24, 2002 (File No. 333-102193); March 24, 2003 (File No. 333-103981); May 17, 2004 (three files, File Nos. 333-115554, 333-115555, and 333-115556); March 7, 2005 (File No. 333-123158); and December 29, 2005 (File No. 333-130745).

Signatures

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: April 25, 2006

Nova Measuring Instruments Ltd.
(the "Registrant")

BY: /S/ Dror David

Dror David
Chief Financial Officer

Exhibit Index

Exhibit 99.1: Press Release

Exhibit 99.2: Asset Purchase Agreement

