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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**  
Washington, D.C. 20549

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**SCHEDULE 13D**

**Under the Securities Exchange Act of 1934  
(Amendment No. 2)\***

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**Hydrogenics Corporation**  
(Name of Issuer)

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**Common Shares**  
(Title of Class of Securities)

**CA4488832078**  
(CUSIP Number)

**CommScope, Inc.**  
**1100 CommScope Place, SE**  
**Hickory, North Carolina 28602**  
**(800) 324-2200**

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

**March 31, 2011**  
(Date of Event Which Requires Filing of this Statement)

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If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of §§240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box.

**Note:** Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Rule 13d-7 for other parties to whom copies are to be sent.

\* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

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CUSIP No. CA4488832078

1. Names of Reporting Persons

CommScope Holding Company, Inc.

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a)  (b)

3. SEC Use Only

4. Source of Funds (See Instructions)

WC

5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)

6. Citizenship or Place of Organization

Delaware

Number of  
Shares  
Beneficially  
Owned by  
Each  
Reporting  
Person  
With

7. Sole Voting Power

0

8. Shared Voting Power

1,575,659

9. Sole Dispositive Power

0

10. Shared Dispositive Power

1,575,659

11. Aggregate Amount Beneficially Owned by Each Reporting Person

1,575,659

12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)

13. Percent of Class Represented by Amount in Row (11)

26.4%

14. Type of Reporting Person (See Instructions)

CO

CUSIP No. CA4488832078

1. Names of Reporting Persons

CommScope, Inc.

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a)  (b)

3. SEC Use Only

4. Source of Funds (See Instructions)

WC

5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)

6. Citizenship or Place of Organization

Delaware

Number of  
Shares  
Beneficially  
Owned by  
Each  
Reporting  
Person  
With

7. Sole Voting Power

0

8. Shared Voting Power

1,575,659

9. Sole Dispositive Power

0

10. Shared Dispositive Power

1,575,659

11. Aggregate Amount Beneficially Owned by Each Reporting Person

1,575,659

12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)

13. Percent of Class Represented by Amount in Row (11)

26.4%

14. Type of Reporting Person (See Instructions)

CO

CUSIP No. CA4488832078

1. Names of Reporting Persons

CommScope, Inc. of North Carolina

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a)  (b)

3. SEC Use Only

4. Source of Funds (See Instructions)

WC

5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)

6. Citizenship or Place of Organization

North Carolina

Number of  
Shares  
Beneficially  
Owned by  
Each  
Reporting  
Person  
With

7. Sole Voting Power

0

8. Shared Voting Power

1,575,659

9. Sole Dispositive Power

0

10. Shared Dispositive Power

1,575,659

11. Aggregate Amount Beneficially Owned by Each Reporting Person

1,575,659

12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)

13. Percent of Class Represented by Amount in Row (11)

26.4%

14. Type of Reporting Person (See Instructions)

CO

**Item 1. Security and Issuer**

The class of equity securities to which this Statement on Schedule 13D relates is the common stock (the "Common Stock") of Hydrogenics Corporation, a corporation existing under the laws of Canada ("Hydrogenics"). The address of Hydrogenics' principal executive office is 5985 McLaughlin Road, Mississauga, Ontario, Canada L5R 1B8.

**Item 2. Identity and Background**

This Schedule 13D is being filed by CommScope Holding Company, Inc. ("Holding"), CommScope Inc., a Delaware corporation and a wholly-owned subsidiary of Holding ("Parent"), and CommScope, Inc. of North Carolina, a North Carolina corporation and a wholly-owned subsidiary of Parent ("CommScope NC" and together with Holding and Parent, the "Reporting Persons"). The principal executive office for each Reporting Person is 1100 CommScope Place, SE, Hickory, North Carolina 28602. None of the Reporting Persons have been convicted in a criminal proceeding during the last five years. None of the Reporting Persons have been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction during the last five years, and none of the Reporting Persons are subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

**Item 3. Source and Amount of Funds or Other Consideration**

The shares of Hydrogenics Common Stock purchased by CommScope NC (the "Share Purchases") were purchased with cash generated from operations in a private transaction. The aggregate cost of the 1,575,659 shares of Hydrogenics Common Stock (the "Shares") purchased by CommScope NC is \$6,000,000.

**Item 4. Purpose of Transaction**

The Share Purchases were consummated pursuant to a Subscription Agreement, dated as of August 9, 2010 between Hydrogenics and CommScope NC, a copy of which was previously included as Exhibit 99.1 to the Schedule 13D filed August 12, 2010, which this Schedule 13D amends, and is incorporated herein by reference (the "Subscription Agreement"). The Share Purchases were made as part of a strategic alliance between CommScope NC and Hydrogenics that provides for the development of next-generation power modules for telecom-related backup power applications, to be incorporated by the Reporting Persons into their products. Under the terms of the Subscription Agreement, CommScope NC acquired 879,393 shares of Hydrogenics Common Stock at a price of \$3.68 per share on August 12, 2010 (the "First Tranche"), 207,268 shares of Hydrogenics Common Stock at a price of \$3.68 per share on September 29, 2010 (the "Second Tranche") and 488,998 shares of Hydrogenics Common Stock at a price of \$4.09 per share on March 31, 2011 (the "Third Tranche"). In addition, CommScope NC has the right to acquire additional shares of Hydrogenics Common Stock in an additional tranche pursuant to the Subscription Agreement at a price of \$4.09 per share upon the achievement of certain milestones and satisfaction of certain conditions by Hydrogenics.

**Item 5. Interest in Securities of the Issuer**

The aggregate percentage of shares of Hydrogenics Common Stock reported owned by the Reporting Persons is based upon 5,977,628 shares of Hydrogenics Common Stock outstanding as of March 31, 2011, which is the sum of: (i) 5,488,630 shares of Hydrogenics Common Stock outstanding as of March 30, 2011; and (ii) 488,998 shares of Hydrogenics Common Stock issued to CommScope NC in the Third Tranche. Each of the Reporting Persons share voting and dispositive power over all of the Shares.

**Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer**

The Subscription Agreement provides that, until the 12 month anniversary of the closing of CommScope NC's purchase of a fourth tranche of shares of Hydrogenics Common Stock, if Hydrogenics sells shares of its Common Stock (an "Offering"), CommScope NC will have the right to acquire the number of shares of Hydrogenics Common Stock in the Offering necessary to maintain its percentage ownership interest in Hydrogenics immediately prior to the Offering (the "Participation Right"). This Participation Right shall not apply to issuance by the Company of: (i) securities to its directors, officers or employees; (ii) securities upon the conversion of securities convertible or exercisable into equity securities (including the Company's warrants); (iii) securities offered as part of a bona fide public offering; (iv) equity securities issued as a stock dividend; (v) securities issued in connection with an acquisition, merger, business combination, tender offer, take-over bid, arrangement, asset purchase transaction, joint venture or similar transaction (other than with respect to third party financing in connection therewith); or (vi) securities for consideration other than cash (each, an "Excluded Issuance").

Upon the closing of the Second Tranche, CommScope NC acquired the right to designate one of its officers or directors, or an officer or director of an affiliate, to attend meetings of the Hydrogenics board of directors as an observer (the "Board Observer Right"). The Board Observer Right will expire if CommScope NC's ownership should fall below 5% for any reason, including an Excluded Issuance.

**Signature**

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

COMMSCOPE HOLDING COMPANY, INC.

April 4, 2011

\_\_\_\_\_  
Date

/s/ Frank B. Wyatt II

\_\_\_\_\_  
Signature

Frank B. Wyatt II  
Senior Vice President

\_\_\_\_\_  
Name/Title

COMMSCOPE, INC.

April 4, 2011

\_\_\_\_\_  
Date

/s/ Frank B. Wyatt II

\_\_\_\_\_  
Signature

Frank B. Wyatt II  
Senior Vice President

\_\_\_\_\_  
Name/Title

COMMSCOPE, INC. OF NORTH CAROLINA

April 4, 2011

\_\_\_\_\_  
Date

/s/ Frank B. Wyatt II

\_\_\_\_\_  
Signature

Frank B. Wyatt II  
Senior Vice President

\_\_\_\_\_  
Name/Title