



COLUMBIA UNIVERSITY
1700 BROADWAY
NEW YORK, NY 10027

Sender
ALCATEL VACUUM PRODUCTS
67 Sharp Street
HINGHAM, MA 02043

Attn : GEREMY DODD
Tel : 914-591-2821

QUOTATION

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N° 20046721 / Date 01.07.2005

Dear Jeremy:

Thank you for your recent inquiry regarding Alcatel's ASM142 Helium Leak Detectors. Listed below you will find our quotation for the ASM142 standard series HLD and the ASM142D Oil Free Series. I will be in your area next week if you would like to have a demonstration of the ASM142.

I can be contacted at Alcatel's Hingham, Massachusetts facility at 781-682-1232 or on my cell phone at 781-910-4515.

ITEM	PART NUMBER DESCRIPTION	QTY	UNIT PRICE	TOTAL PRICE
10	T0R00000B710 ALCATEL ASM142 115V 60Hz standard unit	1	USD 20,556.00 10.00%-	USD 18,500.40

Alcatel model ASM142 fully automatic multi-purpose helium leak detector. Unit consists of the revolutionary molecular drag pump model AMP0071 specifically designed for helium leak testing purposes and a 7 cfm two stage, direct drive, helium stable mechanical roughing/backing vacuum pump. Suited for repetitive or non-repetitive sequential testing for applications requiring high performance operation or as service tool applications. Outstanding features and benefits include:

- . High sensitivity of 1E-11 atm. cc/sec. helium (according to AVS 2.1 and ISO 3530 standards) at full pumping speed.
- . High inlet port test pressure up to 10 mbar (7500 microns) in full contra flow configuration for maximum performance.
- . Auto-calibration with temperature compensated internal helium calibrated leak for extended accuracy.
- . Dual vacuum concept and automatic crossover from gross to fine leaks with no operator intervention and enhanced performance.
- . Unique oil change system allows quick drainage and fill of mechanical pump without removing the cover of the

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	unit. . Fast automatic start-up of less than 3 minutes consisting of pump activation, secondary filament check, primary filament ramp-up and comprehensive auto calibration sequence. . Enhanced helium background suppression with zero to ensure that helium signal will never fall below zero. . Single button start up and shut down regardless on mode of operation. . Four levels of user interface to address application requirements.		USD	USD
20	W0R00000B710 Alcatel ASM142D 115 V 60Hz standard unit	1	24,750.00 10.00%-	22,275.00
	Alcatel model ASM142D fully automatic, multi-purpose, compact dry helium leak detector. Unit consists of the superior Holweck molecular drag pump design and integrated oil-free roughing/backing module with 16cfm independent drag booster. Ideally suited for repetitive or non-repetitive sequential testing for applications requiring high performance and ultra-clean operations. Outstanding features and benefits include: . High sensitivity of 1 x 10 ⁻¹¹ atm. cc/sec. helium (according to AVS 2.1 and ISO 3530 standards) at full pumping speed. . High inlet port test pressure up to 10 mbar (7500 microns) in full contra flow configuration for maximum performance. . Low 27,000 RPM Holweck molecular drag pump for added ruggedness and superior compression ratio for maximum performance.. . Wide continuous multi-color bargraph measuring range from 10 ⁻¹² to 10 ⁻² atm cc/sec (helium) with high resolution zoom and digital display for ease of interpretation. . High resolution 180 degree deflection mass spectrometer with VHS preamplifier (multi-channel electron multiplier) for added sensitivity, stability and repeatability. . Frequency modulated audio alarm adjustable from 0 to 90 dB to accommodate various working environments. . Integrated multi-language voice synthesizer for additional user interface flexibility. . Auto-calibration with internal helium calibrated leak with temperature compensation for extended accuracy and simplified operation. . Dual vacuum schematics and automatic crossover from gross (contra flow) to fine (interstage pumping) leaks for minimal operator intervention and enhanced performance. . Integrated dry membrane roughing module with 16 CFM booster, assures superior compression ratio and minimal particle generation at inlet and exhaust. . Fast automatic start-up of less than 3 minutes consisting of pump activation, secondary filament check, primary			

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			USD	USD
	filament ramp-up and comprehensive auto calibration sequence. . Enhanced helium background suppression with floating zero to ensure that helium signal will never fall below zero. . Single button start up and shut down regardless on mode of operation. . Four levels of user interface to address application requirements. This system, as well as all other Alcatel helium leak detectors, is fully protected against power failure, movement during operation, air in-rushes or incorrect operations. One spare maintenance kit on consumables, comprehensive operating/service manual, and access to the 24 hour extended support program (ESP) is included.			
30	108068 CART, TRANSPORT - 142	1	0.00	0.00
Amount excl. taxes :				40,775.40 USD

SALES TERMS AND CONDITIONS

LEAD TIME

Item #1: 5 Weeks ARO

Item #2: 8 Weeks ARO

SALES TERMS

FOB: Hingham, Mass

PAYMENT TERMS

Net 30 days

WARRANTY

One year all parts and labor

QUOTATION VALIDITY

02.07.2005

To order, please fax your PO to Alcatel Vacuum Products, Inc., Customer Service at 781-682-1297.

Thank you for your interest in our products.

Sincerely,

David Stockbridge
Regional Sales Manager

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