Introducing the
piccolo xpress™
chemistry analyzer

Fast, easy, accurate on-site chemistry testing

Exceptionally Fast
From sample to complete panel results in approximately 12 minutes

Simple as 1-2-3
1. Add sample
2. Insert disc
3. Read results

Exceptionally Easy
Fully automated system requires no special operating skills

• 0.1cc whole blood, serum or plasma
• Delivers multi-analyte panels including CLIA-waived lipids, liver enzymes and glucose monitoring
• Self calibrates with every test run
• Built-in iQC™ eliminates daily liquid control testing
• Walk-away operation
• Full-color touch screen with intuitive user interface
• Results are provided in a “hard copy” self-adhesive report or can be quickly transferred to a data management system, enabling physicians to rapidly obtain critical diagnostic information at the point-of-care

Exceptionally Accurate
Advanced technology ensures sound results

• Centrifugal and capillary forces mix and dilute the reagents and sample in a self-contained, disposable reagent disc — lessening opportunities for procedural errors
• Accuracy and precision comparable to larger, more expensive laboratory analyzers
• Built-in intelligent quality control (iQC™) meets CLIA and NCCLS guidelines
• iQC™ system performs continuous quality control checks on every run
• Every self-contained reagent disc is barcoded for automatic self-calibration
<table>
<thead>
<tr>
<th><strong>Dimensions</strong></th>
<th>Height 32.4 cm (12.75 in)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Width 15.2 cm (6 in)</td>
</tr>
<tr>
<td></td>
<td>Depth 20.3 cm (8 in)</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>Analyzer 5.1 kg (11.2 lbs)</td>
</tr>
<tr>
<td></td>
<td>Power Adapter 0.7 kg (1.6 lbs)</td>
</tr>
<tr>
<td><strong>Power Requirements</strong></td>
<td>100-240 volts AC; 50-60 Hz; or 15 volts DC, 5.0A</td>
</tr>
<tr>
<td><strong>Sample Size</strong></td>
<td>0.1cc (100 µl)</td>
</tr>
<tr>
<td><strong>Sample Type</strong></td>
<td>Lithium heparin, whole blood, serum or plasma</td>
</tr>
<tr>
<td><strong>Test Time</strong></td>
<td>Approximately 12 minutes</td>
</tr>
<tr>
<td><strong>Quality Control Features</strong></td>
<td>Built-in intelligent Quality Control (iQC™) system</td>
</tr>
<tr>
<td><strong>Communication</strong></td>
<td>Bi-directional input/output</td>
</tr>
<tr>
<td><strong>Consumables</strong></td>
<td>8-cm diameter, single-use, self-contained plastic chemistry reagent discs. Each disc contains all reagents needed to perform a panel of tests on a single sample</td>
</tr>
<tr>
<td><strong>Data Input Display</strong></td>
<td>10-digit numeric –VGA color touchscreen</td>
</tr>
<tr>
<td><strong>Printer</strong></td>
<td>Built in thermal printer with adhesive backed paper</td>
</tr>
<tr>
<td><strong>Memory Capacity</strong></td>
<td>Up to 5000 patient and quality control results</td>
</tr>
<tr>
<td><strong>Mode of Operation</strong></td>
<td>Continuous</td>
</tr>
<tr>
<td><strong>Protection Against Ingress of Fluids</strong></td>
<td>Ordinary equipment (IPXO)</td>
</tr>
<tr>
<td><strong>Analyzer Software</strong></td>
<td>Comprised of two matched programs; one processes the information and controls the measurement engine itself, the other reports analyte concentrations</td>
</tr>
<tr>
<td><strong>Analyzer Hardware</strong></td>
<td>Xenon arc stroboscopic lamp and a beam-splitter/detector read nine wavelengths</td>
</tr>
<tr>
<td><strong>Ambient Operating Temperature Range</strong></td>
<td>15-32° C (59-90° F)</td>
</tr>
<tr>
<td><strong>Reaction Temperature</strong></td>
<td>37° C (98.6° F)</td>
</tr>
<tr>
<td><strong>Operating Humidity</strong></td>
<td>0-80%, noncondensing</td>
</tr>
<tr>
<td><strong>Thermal Protection Rating</strong></td>
<td>70° C (158°F)</td>
</tr>
</tbody>
</table>
Piccolo Panel Information

On the spot lab results (without the lab)

With the Piccolo xpress™ you can perform the most commonly requested chemistry panels using 0.1cc of whole blood, serum, or plasma and get accurate results in approximately 12 minutes.

- Built-in intelligent quality control meets CLIA and NCCLS requirements for daily control testing
- Panel results are printed on an adhesive-backed paper that can be easily applied to patient charts or transferred to a data management system
- On-board calibration eliminates manual testing
- CLIA-waived lipids, liver enzymes and glucose monitoring

Single-use reagent discs make testing easy and reduce operator errors

The reagent disc is composed of three injection-molded plastic parts which are ultrasonically welded together and contain all the diluent and dry reagents necessary to perform a panel of tests. The layers form the cuvettes, chambers, and passageways in which the fluids are processed.

The top protective layer of the disc also provides bar-coded calibration information, the type of test panel, lot # and the expiration date; eliminating time-consuming, error-prone manual reagent calibrations and the possibility of using expired reagents.
**Comprehensive Metabolic Panel** ALB, ALP, ALT, AST, BUN, Ca, Cl, CRE, GLU, K+, Na+, TBIL, tCO², TP

**Basic Metabolic Panel** BUN, Ca, Cl, CRE, GLU, K+, Na+, tCO²

**Lipid Panel** CHOL, CHOL/HDL*, HDL, LDL*, TRIG, VLDL*

**Lipid Panel Plus** ALT, AST, CHOL, CHOL/HDL*, GLU, HDL, LDL*, TRIG, VLDL*

**Liver Panel Plus** ALB, ALP, ALT, AMY, AST, GGT, TBIL, TP

**General Chemistry 6** ALT, AST, BUN, CRE, GGT, GLU

**General Chemistry 13** ALB, ALP, ALT, AMY, AST, BUN, Ca, CRE, GGT, GLU, TBIL, TP, UA

**Electrolyte Panel** Cl⁻, K⁺, Na⁺, tCO²

**Kidney Check** BUN, CRE

**Basic Metabolic Panel Plus** BUN, Ca, Cl, CRE, GLU, K⁺, Na⁺, tCO₂, Mg, Lactate Dehydrogenase

**Renal Function Panel** ALB, BUN, Ca, Cl, CRE, GLU, K⁺, Na⁺, PHOS, tCO₂

**Hepatic Function Panel** ALB, ALP, ALT, AST, DBIL, TBIL, TP

**MetLyte 8 Panel** BUN, CK, Cl, CRE, GLU, K⁺, Na⁺, tCO₂

*Calculated
INTELLIGENT QUALITY CONTROL (iQC™)

Be confident in every test result

Meticulous quality control (QC) is essential for accurate test results. Which is why the Piccolo xpress™, uses “intelligent Quality Control” (iQC™), a unique process that monitors the analyzer, the reagent disc, and the sample during each run to verify correct electronic and chemistry performance.

- iQC™ automatically suppresses any single chemistry test or the entire panel if the analyzer electronics or optics, reagent stability, chemistry reactions, sample integrity or compliance to the procedural steps are compromised
- Error codes or messages immediately alert the operator to any problems
- iQC™ performs hundreds of QC checks automatically and simultaneously with every disc run

Continuous iQC™ ensures accurate and reliable results every time

iQC™ works from start to finish to ensure that each test run is absolutely accurate. 0.1cc of whole blood, serum, or plasma is inserted directly into the reagent disc, where sample preparation occurs automatically. All reactions, including analyte, reagent and instrument QC testing, occur in solution within tiny cuvettes on the periphery of the disc. The Piccolo xpress™ generates powerful flashes of full-spectrum white light and measures absorption for each reaction at multiple wavelengths. To ensure accurate results, iQC™:

- Verifies the composition and delivery within the disc of all substances involved in the chemical reactions
- Validates the performance of the light-generating and detection components of the analyzer
- Audits the conversion of the light absorbance into digital values for use in mathematical algorithms

Reagent disc and iQC™ work flawlessly together

- iQC™ verifies the integrity of the bar code information on the disc (disc identification code, lot number, and expiration date), eliminating the possibility of using expired reagents
- Calibration information is automatically transferred to the analyzer’s memory for accurate calculation of results
- Disc-specific information is stored along with the system QC data in the analyzer’s memory for easy reference
Easy-to-read iQC™ report

- Run-specific information
- Eight different system checks are carried out at the beginning of each run. In order to pass iQC™, the values must fall between 90 and 110%
- Contains results obtained in the chemistry iQC™ testing. Any value above the minimum indicates disc was stored correctly and all chemistries were viable at time of testing
- Any run that remains in the analyzer memory may be recalled and printed
- Bi-directional analyzer stores up to 5000 results which may be transferred to a data management system

Comprehensive Metabolic

12 Jun 2006 03:50 PM
Sample Type: Patient
Sample ID: 789
Alternate ID: 845
Gender: Male
Age: 24 Years
Operator ID: 423
Disc Lot Number: 52000
Serial Number: 0000P02618

Instrument QC: 100
iQC 1: 100 340 nm: 100
iQC 2: 100 405 nm: 100
iQC 3: 100 467 nm: 100
iQC 4: 100 500 nm: 100
iQC 5: 100 515 nm: 100
iQC 6: 100 550 nm: 100
iQC 7: 100 600 nm: 100
iQC 8: 100 630 nm: 100
Range: 90-110 95-105
Expand efficiency and increase profitability in your practice

Incorporate the Piccolo xpress™ into your practice, and discover how easy it is to realize a financial benefit—and not just from reimbursement for the lab test. We’ll show you how to maximize your profitability and gain a competitive edge by offering your patients options that will ultimately improve their satisfaction.

Identify new revenue streams and enhance office profitability

Why send your patients to a lab when you can bring the lab to your patients? With on-the-spot chemistry testing, you can:

- Capture the revenue stream from commercial or hospital lab and put it back into your practice
- Collect insurance reimbursement including Medicare for all panels
- Expand patient visit time justifiably through lab review consultation
- Reduce staff time obtaining commercial or hospital lab results

Maximize your revenue without increasing your time

By providing on-site lab services with the Piccolo xpress™, you control the testing, time to results and counseling at the time of the patient visit. This allows you to:

- Eliminate unbillable time reviewing labs and patient follow-up for further discussion at a later date
- Expand billable hours by reviewing lab results with the patient at the point-of-care
- Schedule your ongoing patient lab visits for maximum return on time
Improve patient care and satisfaction

Fast, accurate, on-the-spot test results allow you to:

• Enhance the value of your services by offering lab results and treatment consultation to your patient in just one visit
• Eliminate patient having to take extra time off to be tested outside the practice
• Ensure your patients get their labs done and that the results are up-to-date

Ease your concerns about patient liability

Immediate lab results provide peace of mind for you and your patients. With the Piccolo xpress™, you can:

• Respond instantly to abnormal labs and treat or triage while the patient is still in your office
• Adjust medications based on real-time lab results
• Remove the risk of lost or delayed abnormal lab results

Average Reimbursement Per Panel

Lipid Panel
Lipid Panel Plus
Comprehensive Metabolic Panel
Basic Metabolic Panel Plus

Average Reimbursement

$18.72
$22.37
$14.77
$21.49

*Bundled reimbursement may occur when running multiple reagent discs on a single patient.
<table>
<thead>
<tr>
<th></th>
<th>Piccolo xpress™</th>
<th>Alfa Wasserman ACE</th>
<th>i-Stat Analyzer</th>
<th>Cholestech LDX Analyzer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>List Price</strong></td>
<td>$18,000</td>
<td>$45,000</td>
<td>$8,500</td>
<td>$2,005</td>
</tr>
<tr>
<td><strong>Data Management</strong></td>
<td>On Board</td>
<td>External Computer Included</td>
<td>Via Central data station PC - $25,000</td>
<td>Waived Instrument – Manual Charting</td>
</tr>
<tr>
<td><strong>Storage Volume</strong></td>
<td>5000</td>
<td>500/2500</td>
<td>5000</td>
<td>Last patient only</td>
</tr>
<tr>
<td><strong>QC Analysis – Levy Jennings</strong></td>
<td>N/A</td>
<td>Yes</td>
<td>Yes, via central data station PC</td>
<td>No</td>
</tr>
<tr>
<td><strong>Data Transfer</strong></td>
<td>5 bi-directional USBs</td>
<td>RS232 bi-directional</td>
<td>Yes</td>
<td>None</td>
</tr>
<tr>
<td><strong>Reagent</strong></td>
<td>Self contained multi analyte reagent disk</td>
<td>Liquid</td>
<td>Dry</td>
<td>Dry (Cholesterol, Glucose &amp; ALT &amp; AST)</td>
</tr>
<tr>
<td><strong>Reagent Stability</strong></td>
<td>9-18 months from date of manufacture</td>
<td>24 hrs – 30 days (open vial)</td>
<td>Minimum 4-6 months refrigeration</td>
<td>5-9 months</td>
</tr>
<tr>
<td><strong>Daily QC</strong></td>
<td>On board iQC w/each disc run</td>
<td>Liquid for each assay being tested</td>
<td>Electronic</td>
<td>Electronic</td>
</tr>
<tr>
<td><strong>Calibration</strong></td>
<td>Auto bar coded with each disc run</td>
<td>Auto bar coded with each disc run</td>
<td>Manual</td>
<td>Optics Check Cassette</td>
</tr>
<tr>
<td><strong>System Footprint</strong></td>
<td>9.5” H x 6” W x 11.5”D</td>
<td>22” x 27” Bench top</td>
<td>2.5” x 2”</td>
<td>5” x 8” Benchtop, not including separate printer</td>
</tr>
<tr>
<td><strong>System Weight</strong></td>
<td>15 Lbs</td>
<td>201 lbs.</td>
<td>1 lbs.</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Accurate Pipetting</strong></td>
<td>No need</td>
<td>Yes (controls &amp; calibrators)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td><strong>Specimen Dilution</strong></td>
<td>No need</td>
<td>Yes, automatic</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td><strong>Laboratory Technician</strong></td>
<td>No need</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td><strong>Whole Blood Sample</strong></td>
<td>Yes (plus serum and plasma)</td>
<td>No</td>
<td>Yes</td>
<td>Yes (Serum, Plasma ok but = CLIA Mod.)</td>
</tr>
<tr>
<td><strong>Sample Analysis</strong></td>
<td>Stat</td>
<td>Stat, Batch, Random Access</td>
<td>Stat (multi-test cassettes)</td>
<td>Stat (multi-test cassettes)</td>
</tr>
<tr>
<td><strong>Hard Copy Printout</strong></td>
<td>On board</td>
<td>External accessory item</td>
<td>included Via central data station PC</td>
<td>Attached print module</td>
</tr>
<tr>
<td><strong>Electrolytes (Na,K,Cl)</strong></td>
<td>Yes</td>
<td>Yes, on Board</td>
<td>Yes (ionized Calcium)</td>
<td>No</td>
</tr>
<tr>
<td><strong>Electrolyte Methodology</strong></td>
<td>Enzymatic</td>
<td>ISE</td>
<td>ISE</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>On-Board Refrigeration</strong></td>
<td>No need</td>
<td>Yes</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Plumbing Requirements</strong></td>
<td>Not Required</td>
<td>No, on board wash solutions</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Routine Maintenance Chemistry</strong></td>
<td>No need</td>
<td>Wipe probe daily/$250 electrodes every 6 months, tubing &amp; parts $5000 per year</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td><strong>Routine Maintenance Electrolytes</strong></td>
<td>No need</td>
<td>Once per month-Auto Flushing</td>
<td>None</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Chemistry Panels</strong></td>
<td>Gen Chems, Lipids, Electrolytes, LD</td>
<td>Gen Chems, Lipids, Electrolytes, LD</td>
<td>Gen Chems, Electrolytes</td>
<td>Lipids, AST, ALT, Glu only</td>
</tr>
</tbody>
</table>
Comparison of traditional lab testing versus the Piccolo xpress™

**TRADITIONAL LAB**

1. **See Patient**
2. **Prepare syringe/vacutainer, collect blood sample**
   *be sure to draw enough for lab test requirement*
3. **Label tube**
4. **Wait 20 minutes** for proper blood clot to form
5. **Spin sample for 10 minutes**
6. **Separate sample from blood cells**
   *(separate ASAP, or lab results may be compromised)*
7. **Label transport tube(s)**
8. **Fill out necessary lab request forms, and package tube(s) for pick up**
9. **Wait up to 4 days** for results
   
   While waiting, make **best guess** and begin **temporary** medical treatment plan.
   Receive numerous phone calls from worried client requesting lab results.
   Technician calls lab requesting lab results.
   *(Caution: with phone results, transcription errors may occur)*
10. **Receive lab results**
11. **Problem with sample/lab**
12. **Review chart and interpret lab results**
13. **Call patient for 2nd appointment to recollect blood sample**
14. **Call patient for 2nd consultation regarding medical treatment plan**
15. **Start process over again**
16. **Keep a record of all lab work to ensure accurate billing**

**PICCOLO XPRESS™**

1. **Step 1: Add sample - 0.1 cc**
2. **Step 2: Insert disc**
3. **Step 3: Read results**

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Exceptionally Fast
From sample to complete panel results in 3 simple steps and approximately 12 minutes

Exceptionally Easy
Fully automated system requires no special operating skills
- 0.1cc whole blood, serum or plasma
- Self calibrates with every test run
- Built-in iQC™ eliminates daily control testing and meets CLIA and CLSI guidelines
- Full-color touch screen with intuitive user interface
- Results are printed on a self-adhesive hard copy or via electronic transfer, allowing immediate access to critical information at the point-of-care
- Large memory capacity stores up to 5000 patient records
- Externally accessible bi-directional input/output and USB data transfer technology

Exceptionally Accurate
Advanced technology ensures sound results
- Centrifugal action mixes the reagents and sample in a disposable self-contained disc – reducing procedural errors
- Accuracy and precision comparable to larger, more expensive laboratory analyzers
- iQC™ system performs continuous quality control checks on every run
- Every self-contained reagent disc is barcoded for automatic self-calibration

Exceptionally Versatile
Wide range of available panels expand your on-site testing capabilities

<table>
<thead>
<tr>
<th>Panel Type</th>
<th>Tests Included</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehensive Metabolic Panel</td>
<td>ALB, ALP, ALT, AST, BUN, Ca, Cl(^-), CRE, GLU, K(^+), Na(^+), TBIL, tCO(_2), TP</td>
</tr>
<tr>
<td>Basic Metabolic Panel</td>
<td>BUN, Ca, Cl(^-), CRE, GLU, K(^+), Na(^+), tCO(_2)</td>
</tr>
<tr>
<td>Lipid Panel</td>
<td>CHOL, CHOL/HDL(^<em>), HDL, LDL(^</em>), TRIG, VLDL(^*)</td>
</tr>
<tr>
<td>Lipid Panel Plus</td>
<td>ALT, AST, CHOL, CHOL/HDL(^<em>), GLU, HDL, LDL(^</em>), TRIG, VLDL(^*)</td>
</tr>
<tr>
<td>Liver Panel Plus</td>
<td>ALB, ALP, ALT, AMY, AST, GGT, TBIL, TP</td>
</tr>
<tr>
<td>General Chemistry 6</td>
<td>ALT, AST, BUN, CRE, GGT, GLU</td>
</tr>
<tr>
<td>General Chemistry 13</td>
<td>ALB, ALP, ALT, AMY, AST, BUN, Ca, CRE, GGT, GLU, TBIL, TP, UA</td>
</tr>
<tr>
<td>Electrolyte Panel</td>
<td>Cl(^-), K(^+), Na(^+), tCO(_2)</td>
</tr>
<tr>
<td>Kidney Check</td>
<td>BUN, CRE</td>
</tr>
<tr>
<td>Basic Metabolic Panel Plus</td>
<td>BUN, Ca, Cl(^-), CRE, GLU, K(^+), Na(^+), tCO(_2), Mg, Lactate Dehydrogenase</td>
</tr>
<tr>
<td>Renal Function Panel</td>
<td>ALB, BUN, Ca, Cl(^-), CRE, GLU, K(^+), Na(^+), PHOS, tCO(_2)</td>
</tr>
<tr>
<td>Hepatic Function Panel</td>
<td>ALB, ALP, ALT, AST, DBIL, TBIL, TP</td>
</tr>
<tr>
<td>MetLyte 8 Panel</td>
<td>BUN, CK, Cl(^-), CRE, GLU, K(^+), Na(^+), tCO(_2)</td>
</tr>
</tbody>
</table>

*Calculated
SAY HELLO to a New Era in Waived Chemistry Analysis!

Piccolo xpress™ CLIA Waived Reagent Panels:
- Comprehensive Metabolic Panel
- Basic Metabolic Panel
- Lipid Panel
- Lipid Panel Plus
- Liver Panel Plus
- General Chemistry 6
- General Chemistry 13
- Electrolyte Panel
- Kidney Check

Piccolo xpress™ waived menu represents over 90% of all requested chemistries

WAVE GOODBYE to:
- Moderate complexity requirements
- Proficiency testing
- Laboratory inspections
- Instrument verifications
- Linearity tests
- Laboratory director requirements
- And... the reference laboratory

Clinical chemistry has arrived at the POL! Now’s your chance to bring comprehensive chemistry capabilities into your practice.