

IRIS iQ®200 Auto-Particle Recognition (APR) Guide					
Particle	Size	Shape	Contrast	Texture	Image
	20um - 40um	Round, cuboidal, columnar-like	White for cytoplasm	Rough with cytoplasmic inclusions, vacuoles, mutiple nuclei	0
	Transitional epithelial cells (TREP)		Black for multiple nuclei or granules		
	12um – 20um	Polygonal, cuboidal, flat cell edge	Big contrast	Rough with cytoplasmic inclusions, vacuoles, big nuclei	
Non-Squamous Epithelial Cells (NSE)	Renal epithelial cells		White for two- thirds cytoplasm		
	(REEP)		Black for large round nuclei		
	20um - 60um	Oblong or cigar shape	White for cytoplasm	Rough, grainy cytoplasm	67
	Proximal tubules cells		Black for small eccentric nucleus		
	14um – 25um	Oval to round	Less contrast White for cytoplasm Grey for small	hite for toplasm rey for small nse centered or ghtly eccentric	©
	Distal tubules cells		dense centered or slightly eccentric nucleus		

Specifications subject to change without notice

Clinical Support 818-709-1244 Option 2 9172 From Avenue Chaisworth California 91311

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Particle	Size	Shape	Contrast	Texture	Image
Red Blood Cell (RBC)	6um – 8 um	Round, biconcave	Black White at center	Smooth	•
White Blood Cell (WBC)	10um – 14um Neutrophils - Monocytes	Spherical rounded shape	Shimmer or glitter	Rough with granular cytoplasm	9
White Blood Cell Clump (WBCC)	10um –100um Neutrophils Clump	Spherical rounded shape	Shimmer or glitter	Rough with granular cytoplasm	
Squamous Epithelial Cells (SQEP)	40um – 60um	Thin, flagstone- shaped, flat sides	Big contrast White for cytoplasm Black for nucleus or granules	Less rough with finely granulated	No.

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IRIS iQ [®] 200 Auto-Particle Recognition (APR) Guide					
Particle	Size	Shape	Contrast	Texture	Image
Mucus (MUCS)	Multiple Sizes	Polygonal shape, with or without fine edge	Less contrast Depend on thread present	Smooth	
Sperm (SPRM)	Oval head 2.5um – 3.5um width, 4um – 5um length	Oval head	Big contrast	Smooth	
	Tail <45um	Slender tail, uniform, straight	Black for whole body		

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IRIS iQ®200 Auto-Particle Recognition (APR) Guide					
Particle	Size	Shape	Contrast	Texture	Image
Hyaline Cast (HYAL)	Multiple Sizes	Cylindrical with parallel sides, round ends. Occasionally, tapered or tail-like end	Less contrast with few, if any, granules in matrix	Smooth or finely wrinkled	al Transport
Unclassified Cast (UNCC)	Multiple Sizes	Cylindrical with parallel sides, round ends. Occasionally, tapered or tail-like end	Large contrast with more granules in matrix	Rough with granulated matrix	
Unclassified Crystals (UNCX)	6um – 20um	Variety shape, diamond, lemon, barrel or cubes	Less contrast, majority black in colour	Smooth	
Bacteria (BACT)	8um – 100um	Rod or cocci	Less contrast with in black colour	Smooth	2
Yeast	Single yeast cell: 5um - 7um	Single yeast cell: ovoid, round	Good contrast with the sharp edge	Smooth	8.
Budding (BYST) Pseudohyphae (HYST)	Pseudohyphae yeast cell: varying lengths	Pseudohyphae yeast cell: budding form			

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*Suggested Bacteria Grading Chart



RARE (1+)

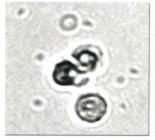




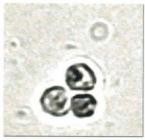




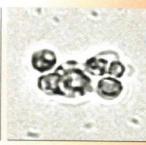
FEW (2+)



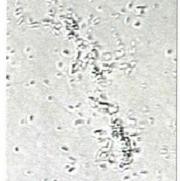




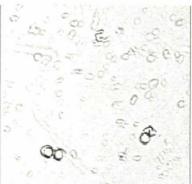




MOD (3+)









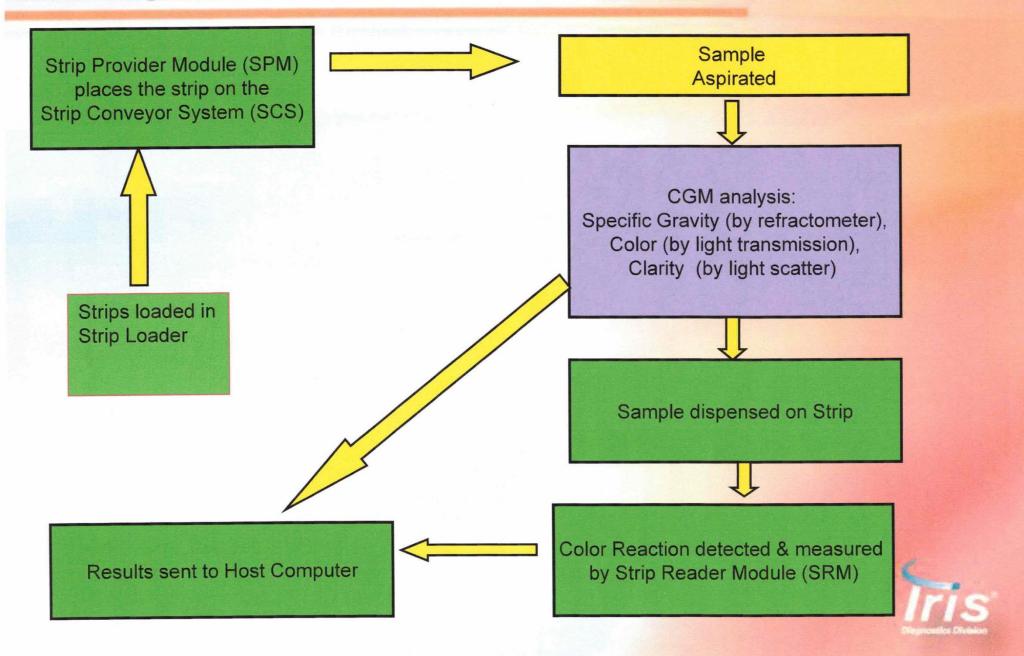
MANY (4+)



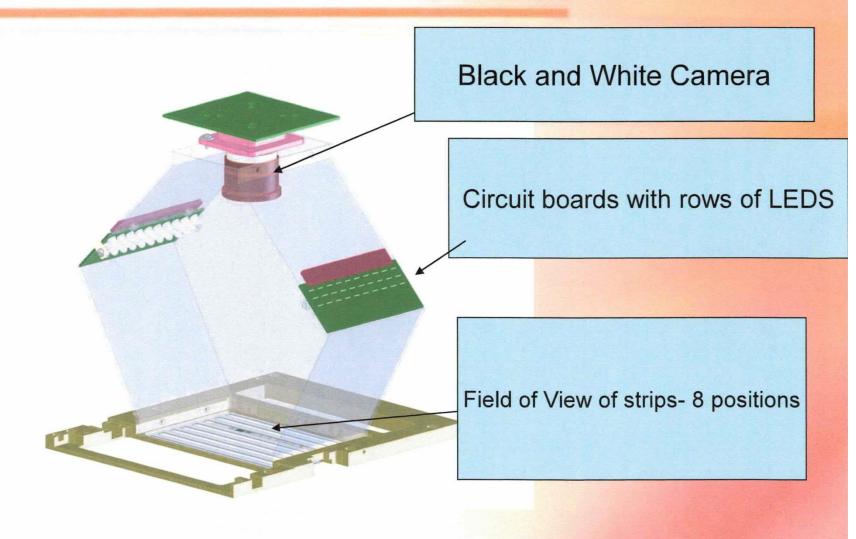
9172 Eton Avenue Chatsworth, CA 91311 A Division of IRIS International, Inc. © Copyright 2008 Iris Diagnostics. All rights reserved. 700-3064 Rev. A (contains 300-4486 verbiage) Reminder: Verify bacteria in WBC, WBCC, Mucus and Squamous Epithelial categories.

*Suggested grading for use when searching for non-auto classified Bacteria.

Analysis Flowchart: iChemVELOCITY



Strip Reader Module (SRM) Diagram

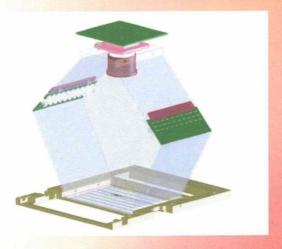




Analysis Process Summary

- Urine reacts with imbedded reagents on the test strip pads.
- Color change: measured by the instrument [SRM].
- The test strip: transported to the waste container.
- Results: consolidated with Microscopy (as user defined) and reported.

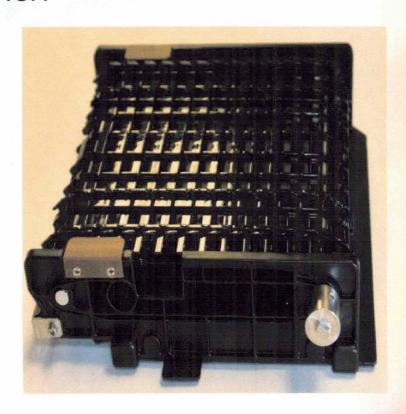






Strip Conveyor System (SCS)

- Primary function of SCS:
 - Presents strips to the Strip Reader Module
 - Used strips are discarded into Strip Waste Container.





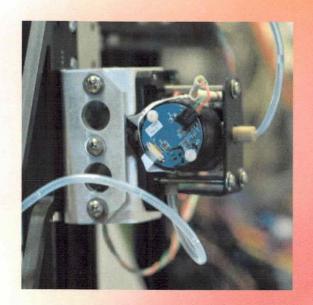
Specific Gravity, Color Clarity Module (CGM)

Specific Gravity

Measured by Refractometer

Color and Clarity

- Color determined by transmitted light.
- Clarity determined by scattered light.





Strip Provider Module

- Primary functions of the Strip Provider Module (SPM):
 - Provides storage area to bulk load chemistry strips.
 - Controls humidity-ensures onboard strip stability.
 - Provides means for separating a single strip from the bulk of strips.
 - Provides a means for orienting the strips pads-face up.
 - Delivers single, properly oriented strips to the Strip Conveyor System (SCS).





Sample Probe

Primary Function of the Sample Probe:

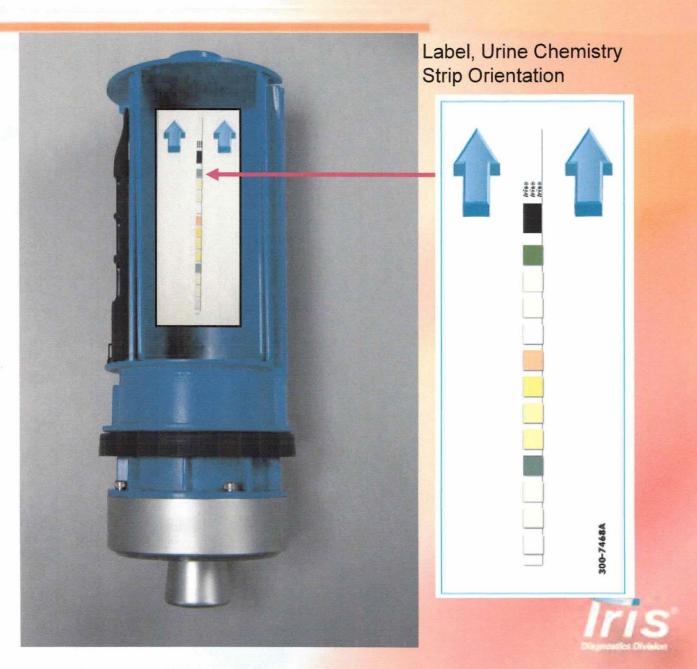
- Mix the specimen inside the sample tube.
- Aspirates approximately 1mL of sample.
- Sample
 - Fills the specific gravity and color-clarity flowcells.
 - Approximately 10 μL-dispensed onto each strip pad.
 - Short sample detection



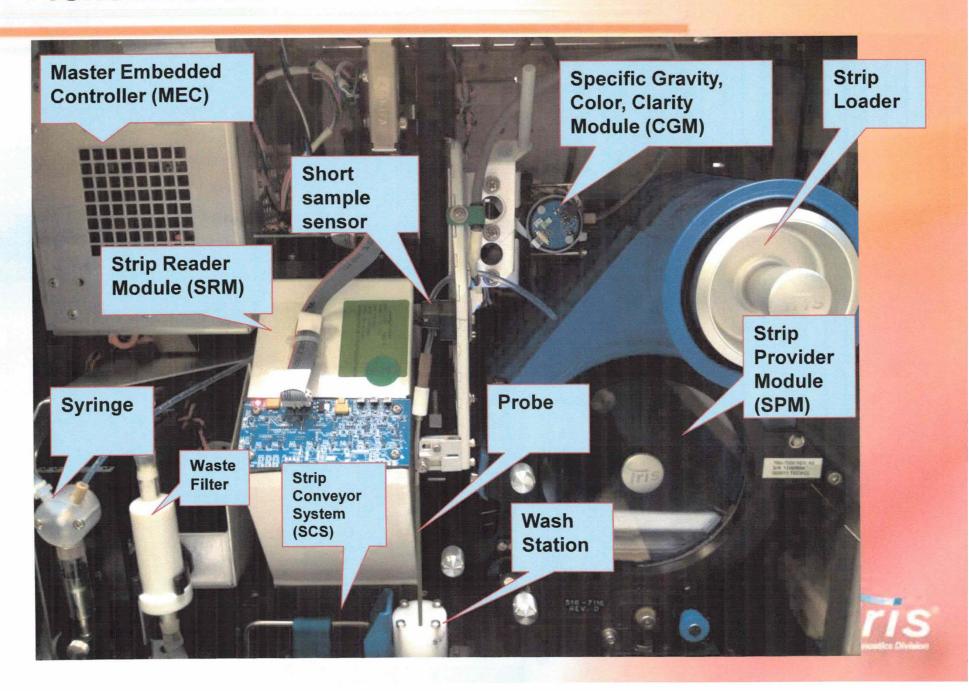
Strip Loader [View of Inside Label]

Primary Function:
Module used to load
strips into the
iChemVELOCITY
analyzer

Strip Loader redesigned! Image for strip orientation only!



iChemVELOCITY: Internal View



iChemVELOCITY: Internal View

