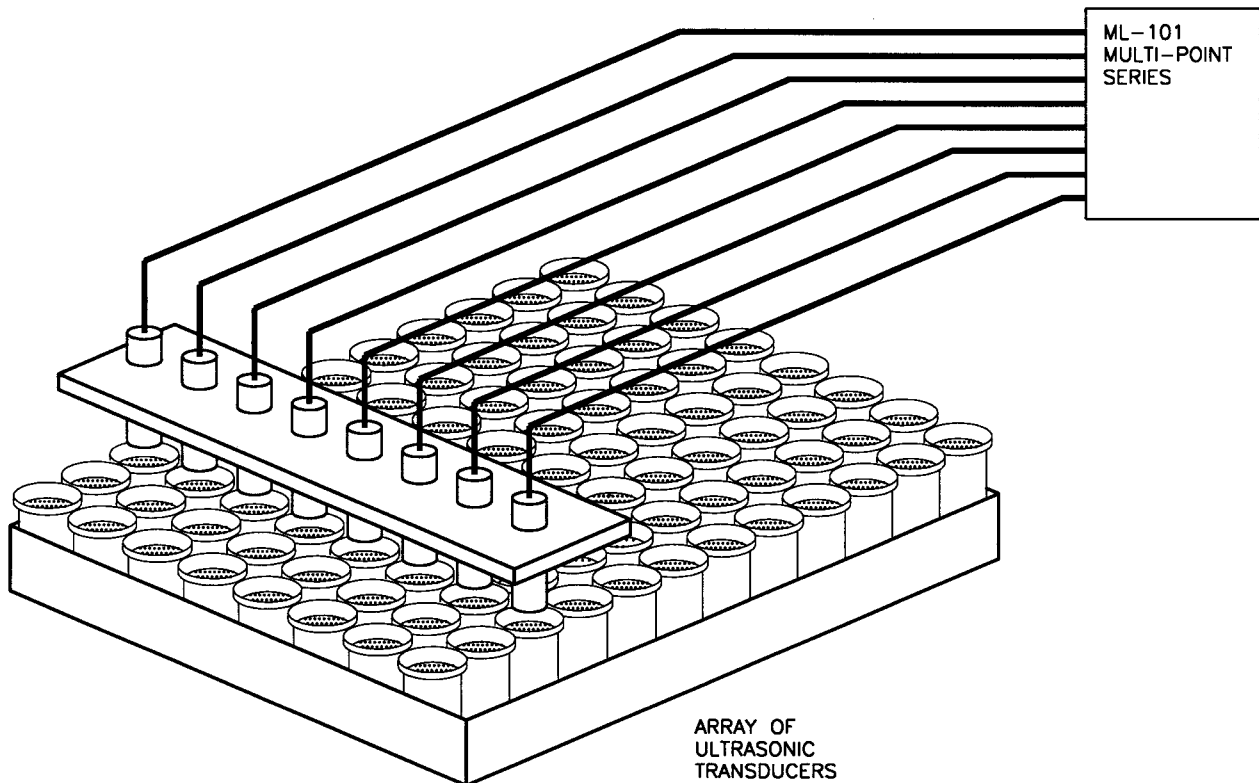




**A MULTI-CHANNEL ML SYSTEM
FOR 96/384 WELL MICROPLATES**



PROBLEM: THE CUSTOMER HAS A RECTANGLE PLATE WITH 96 MICROWELLS (EACH WELL IS 7mm IN DIAMETER AND 11mm DEEP) ORIENTED IN AN 8 BY 12 PATTERN. THE CUSTOMER DESIRED TO MEASURE THE LIQUID LEVEL IN EACH WELL TO AN ACCURACY OF .01 INCHES. THE SYSTEM NEEDED TO PROVIDE OUTPUT SIGNALS IN THE FORM OF AN ACTUAL LIQUID HEIGHT MEASUREMENT (FOR VOLUME CALCULATIONS AND ALARM SIGNAL) FOR GO/NO-GO.

SOLUTION: COSENSE MULTI-CHANNEL ML MEASUREMENT SYSTEM PROCESSES THE MICROPLATE USING EITHER EIGHT OR TWELVE SENSORS. THE SENSOR CHOSEN WAS THE COSENSE 1/4 INCH ML SENSOR. EIGHT (OR TWELVE) SENSORS ARE MOUNTED TOGETHER ON A FIXED MOUNTING SURFACE, SPACED 11mm APART, CENTER TO CENTER (THIS IS THE SAME AS THE WELLS ON THE PLATE). A PLATE IS THEN MOVED INTO POSITION WITH THE FIRST ROW OF WELLS TO BE MEASURED DIRECTLY BELOW THE SENSORS. THE MULTI-CHANNEL ML MEASUREMENT SYSTEM IS THEN STROBED (EITHER BY HARDWARE OR BY SOFTWARE VIA RS-232) TO PERFORM A MEASUREMENT ON ALL CHANNELS. IF THE SOFTWARE PARAMETERS ON THE BOARD HAS BEEN CONFIGURED TO PROVIDE THE GO/NO-GO SIGNAL, THEN THE BANK OF EIGHT (OR TWELVE) RELAYS ARE SET REPRESENTING THE STATE OF THE LEVEL IN EACH WELL WITH ITS RELATION TO ITS PREPROGRAMMED PARAMETER VALUE. THE PLATE IS THEN MOVED SUCH THAT THE SECOND ROW OF WELLS TO BE MEASURED IS DIRECTLY BELOW THE SENSORS. THIS SCENARIO IS REPEATED FOR ALL ROWS OF WELLS. WHEN ALL ROWS HAVE BEEN MEASURED, THE PROCESSED DATA REPRESENTING THE LEVEL IN EACH WELL IS TRANSMITTED VIA RS-232 SERIAL COMMUNICATIONS ALONG WITH AN OVERALL PASS OR FAIL VALUE FOR THE ENTIRE PLATE.

FOR FURTHER INFORMATION, CONTACT YOUR NEAREST COSENSE REPRESENTATIVE OR CALL (631) 231-0735 OR E-MAIL SALES@COSENSE.COM.