Here are the two lcd displays that I have been researching:

**Part number:**NHD-C12864MZ-NSW-BTW

<http://www.newhavendisplay.com/index.php?main_page=popup_image&pID=677>

**Dimensions:**59.00mm L x 30.50mm W

**Pixels:** 128x64

**LED:** White

**Protocol:** Serial

**Digikey Quantity:** 76

**Part number:**F-55472GNBJ-LW-ACN

<http://www.google.com/imgres?imgurl=http://www.optrex.com/SiteImages/PartList/PHOTO/F-55472AAN_transflective.jpg&imgrefurl=http://www.optrex.com/products/new.asp&usg=__ELaaDSHqbcEqbOrl710yE9GqRpM=&h=138&w=220&sz=10&hl=en&start=0&sig2=TIKSaPFtgqM_KBVzNwID4A&zoom=0&tbnid=lvfbLnCu99rLrM:&tbnh=67&tbnw=107&ei=HbybTJnoJOqfnweToeWbDw&prev=/images%3Fq%3DF-55472GNBJ-LW-ACN%26um%3D1%26hl%3Den%26safe%3Doff%26biw%3D1440%26bih%3D732%26tbs%3Disch:10,300&um=1&itbs=1&iact=hc&vpx=373&vpy=315&dur=1381&hovh=67&hovw=107&tx=90&ty=31&oei=HbybTJnoJOqfnweToeWbDw&esq=1&page=1&ndsp=28&ved=1t:429,r:22,s:0&biw=1440&bih=732>

**Dimensions:** 69.00mm L x 36.50mm W

**Pixels:** 128x64

**LED:** White

**Protocol:** Serial/Parallel

**Digikey Quantity:** 99

They both cost ~16 dollars and are super twister nematic - STN - display types.  The second one seems to require less power.  However, one concern is that optrex does not have any useful programing information on its datasheet (bit/LCD-programming setup) whereas the new haven display offers more insight.  If we choose this LCD approach, our user interface will look something like the following:

<http://www.flickr.com/photos/25184651@N07/3178054645/>

**Seven segment LCD displays:**

**Limitations:**

Cannot find one with a back light

Limited to about 6 characters

Will require a lot of I/O ports (not serial protocol, each display requires X amount of pins)

**Benefits:**

Very cheap

Variable sizes

If we were a manufacturing company, it would be cheaper to manufacture seven segment LCD displays with the right numeric in the appropriate location. Since this is out of the option, we are limited to single line seven segment displays with approximately 6 characters.  The only logical choice is to use STN LCD displays because they offer freedom to design an appropriate interface and are the cheapest types of LCD commercially available.  I attached both datasheets to this email for everyone to read over.  I will continue researching LCDs but this is our general direction at this point in time.