Forth Dimension Displays’ WXGA-R3-XD system is a fast switching, all digital high performance reflective microdisplay and interface electronics with an extended length drive cable. Using no colour sub-pixels, the proprietary Time Domain Imaging (TDI) technology provides full colour high resolution images from one all digital microdisplay.

To meet the needs expressed by customers of the WXGA-R3, an extended drive option (-XD) is available which features a longer, thinner and more flexible umbilical cable. This is applicable to end customers requiring 5 metres or more between the main interface electronics and the microdisplay. The WXGA-R3-XD performs to the high standards set by the WXGA-R3, specifically with the increased refresh rate which enhances the performance of the microdisplay in both display and spatial light modulating applications.

**BENEFITS**

- High resolution
- Single microdisplay for multiple applications
- Full colour and all digital
- No sub-pixels or colour filters
- Compatible with multiple illumination sources

**FEATURES**

- WXGA resolution – 1280 x 768 pixels
- Reflective microdisplay with 0.8” / 20.3mm diagonal
- 24-bit native colour depth (8-bit per colour)
- Optional dither algorithms to increase greyscale resolution
- Fast switching liquid crystal with typical 40 μsec switching
- Refresh rate up to 85Hz at full colour depth
- Analogue (VGA) and Digital Video (DVI) inputs
- High fill factor > 96%
- Electronics remote to microdisplay at lengths of 5m or 10 m
- Different display addressing sequences available for diverse applications
- Optional customization service for special requirements
- RS232/ USB interface for system control

**Applications**

**TRAINING AND SIMULATION**
- Monocular viewers
- Binocular viewers
- Head Mounted Displays (HMDs)
- Head-up displays

**MEDICAL IMAGING**
- Image injection for surgical microscopes
- Stereoscopic imaging
- Ophthalmic metrology

**MEDIA**
- High resolution electronic viewfinders (EVFs)
- Holographic Printing

**3D METROLOGY**
- Confocal microscopy
- Fringe projection
- Phase shift profilometry
A system level overview of the WXGA-R3-XD is given below: