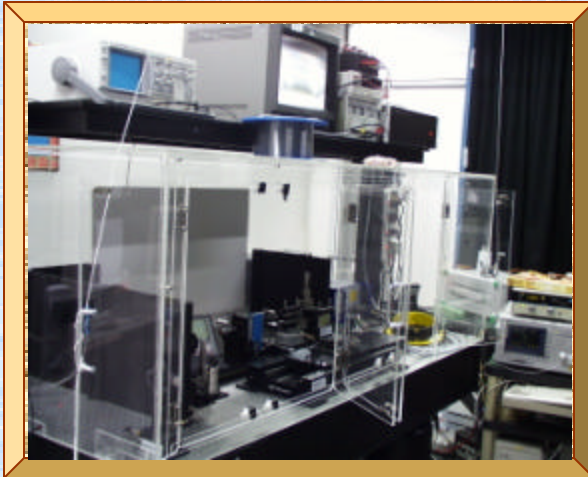




School of Electrical and Electronic Engineering
Network Technology Research Centre



Scanning Beam Fiber Grating Fabrication System



Key Components

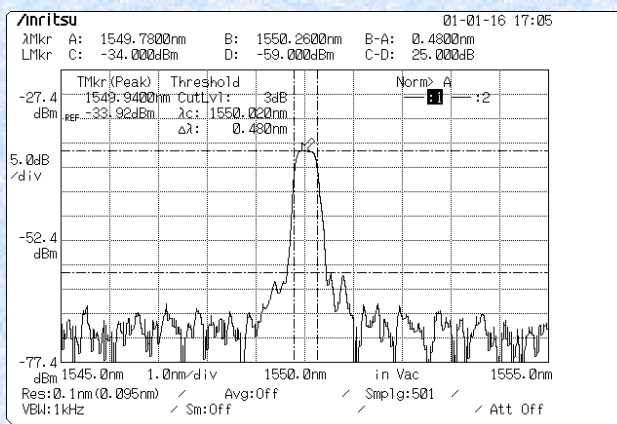
- Frequency doubled Argon laser
- Ultra-precision motorized translation stage
- Vision system
- Fiber strain monitoring system
- Control and measurement equipments

Objectives

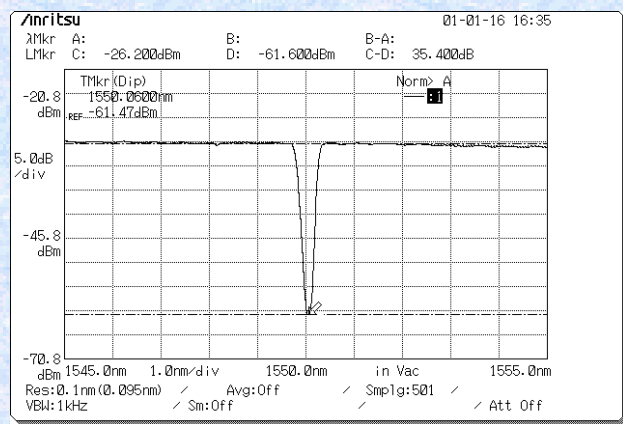
- To set up a FBG fabrication system with emphasis on flexibility and versatile capabilities.
- To complement and further improve the optical communication research by incorporating fiber grating technology.
- To expand NTRC collaboration with other research institutes or industries with complementary technology.

Types of Gratings

- ❖ Uniform FBGs
- ❖ Cascaded gratings
- ❖ Apodized FBGs
- ❖ Chirped gratings
- ❖ Long period gratings
- ❖ Phase shifted gratings



Transmission Spectrum of Apodized FBG



Reflection Spectrum of Apodized FBG

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