



نام آزمایش و مدل :

اندازه گیری سرعت نور

مدل SS۹۹۱۵۶۱

Speed of Light



Experiments:

Exp-۱ To determine the speed of light in air

Principle and Working :

The LASER beam from the transmitter strikes the beam splitter to split the beam in two perpendicular directions. The first beam is transmitted through transmitter directly and is received in first channel of the receiver. The second perpendicular beam from beam splitter travels a larger distance by being reflected back from a mirror placed about ۰ meter or more and is received in second channel of the receiver. In the present setup, the time difference between the two peaks of received LASER signals can be observed on a oscilloscope ($> 4 \cdot \text{MHz}$) and can be used to calculate the speed of light.

Qty	
Laser	۱



transmitter module	
Laser receiver module	۱
Power adaptor ۵V	۲
Beam splitter	۱
Convex lens f=۵۰mm	۲
Cylindrical base	۵
Reflecting mirror in mount	۱
'A' base	۱
Support rod	۱
BNC to	۲