sky. For example, it will never be due north at zero-degree elevation to the horizon. This means that the ability of a flat-plate module to receive light from every direction is somewhat wasted. It can be seen in the section on concentrator optics that the maximum attainable concentration is related to the angular regions where the system can accept light in such a manner that if it can accept a fraction f of the diffuse light falling on it from all directions, then the maximum possible concentration is $1/f$. This relation is further enhanced by a factor of n^2 if the cell is immersed in a dielectric of index of refraction n. Since it is possible to build cells that can receive light from both sides, so-called bifacial cells, another factor of 2 is available by using bifacial cells. The sum result of these

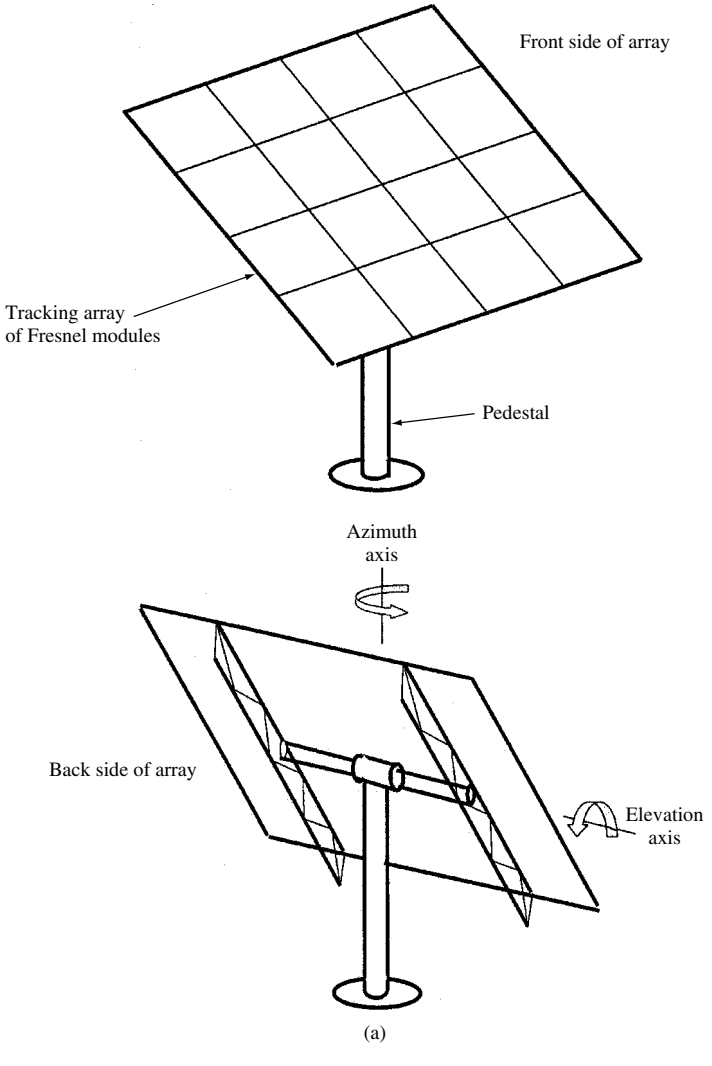

Figure 11.3 Two-axis tracking configurations. (a) Two-axis tracker with elevation and azimuth tracking mounted on a pedestal. (b) Roll-tilt tracking arrangement using central torque tube. (c) Roll-tilt tracking arrangement using box frame. (d) Turntable two-axis tracker