

SENSORS

ENVIRONMENT The list below ranks the level of contamination in a range of typical application environments.

Ranking	Description	Minimum Excess Gain Required
Relatively clean	No dirt buildup on lenses or reflectors	1.5 X
Slightly dirty	Slight buildup of dust, dirt, oil, moisture, etc. on lenses or reflectors. Lenses should be cleaned on a regular schedule.	5 X
Moderately dirty	Obvious contamination of lenses or reflectors. Lenses are cleared occasionally or when necessary.	10 X
Very dirty	Heavy contamination of lenses. Heavy fog, mist, dust, smoke or oil film. Minimal cleaning of lenses takes place.	50 X

As you work your way down the list, the excess gain needed to overcome what's hanging in the air gets higher.

To further complicate matters, with the reflex and thru-beam modes, the source and reflector can be in different locations with different levels of contamination.

For outdoor use, the environment can range from lightly dirty to extremely dirty.