Lenes and Coatings

Most scopes are fogproof and waterproof. Most scopes have coated lenses. The coatings are expensive and vary in type, number, and quality. It is very possible to have a scope with single coated lenses to greatly outperform a scope with multicoated lenses. It all depends on the quality of the glass and the coatings. Good quality does not come cheap.

The following are accepted terms for coatings:

- Coated: A single layer on at least one lens surface.
- Fully Coated: A single layer on all air to glass surfaces.
- Multicoated: Multiple layers on at least one lens surface.
- Fully Multicoated: Multiple layers on all air to glass surfaces.

Coatings reduce glare, and loss of light due to reflection. More coatings normally lead to better light transmission and sharper contrast. Many coatings are also scratch resistant.

Many optics have coatings that prevent water from staying on glass.

Hydrophilic coatings cause water to sheet from glass.

Hydrophobic coatings cause water to bead on glass.

Both work to shed water and allow clearer views in rain or misty conditions.