



## Anti-Glare Film

Ensure your train crew can view display screens clearly and without distraction across the variable lighting conditions that may occur in a locomotive cab



- Improve safety by ensuring train crew can consistently view all PTC and other operational data and warnings
- Lessen discomfort glare and associated digital eye strain for crew members
- Reduce screen scuffing and scratching, and extend the usable life of the screen
- Cost effective - Approx 2% of the cost of replacing a broken display
- Easy to apply - can be done by your mechanics in 15 minutes without any training

Trains need to keep moving 24/7/365, meaning locomotive operators need to deal with varying lighting conditions based on time of day, location & terrain and weather conditions. Simply rounding a curve can cause a sudden and drastic change in the visual environment in the cab.

These types of visibility issues are not new to locomotive engineers. However, in 21st century the stakes have risen with more advanced computer systems such as Positive Train Control (PTC) requiring a higher degree of operator interface. While PTC represents one of the most significant safety advances in the history of Rail, its impact can be severely diminished if a locomotive operator can't clearly see the displayed information.

In response to these challenges, ACS Railroad Solutions [ACS-RS] has partnered with 3M, a global leader in anti-glare technology, to create a solution for the Railroad industry. When applied these filters can allow train crew to see the screens clearly and without distractions and in addition can protect your IDU screens from damage that may necessitate repair or replacement.

### Specifications

Property	Typical Average Units
% Transmission	93.8%
Haze	24.5%
Normal Thickness (with adhesive)	.308mm
Steel Wool Abrasion	No Scratching, 125 g/cm <sup>2</sup> , 25 rubs, #0000 steel Wool
Pencil Hardness	5H
Water contact angle (Hydrophobic)	95 degrees
Hexadecane contact angle (Oleophobic)	55 degrees
Heat Resistance	60° C, 15 % RH, 7 days
Humidity Resistance	85% RH, 40° C, 7 days
Thermal Shock Resistance	-35 C to 60° C for 10 cycles at 11 hours/cycle

### Ordering Information

ACS-RS Part #	Description
32434-1	Anti-Glare Film for 9 & 8 IFD and PTC display CDU
32569-1	SDIS Units Individual screen