

The RPG-7 is a launcher initially designed for airborne troops. Their characteristics make it an ideal weapon for guerrilla fighting. Without the warhead attached the launcher is 37 inches long and weighs approximately 14.5 pounds. With the warhead attached the length is 52 inches and the weight is now 19 pounds. The launcher tube is 40mm in caliber with the warhead 85mm.



The arming range is 5-10 meters with a maximum range of 920 meters. There is a self-destruct fuse on the warhead that detonates at 4.5 seconds after arming. Upon firing, the warhead is rocket assisted. It is first ejected from the launcher at a velocity of 117 meters per second by a small strip powder charge. At approximately 10 meters from the launcher a sustainer rocket ignites and boosts the rocket to a maximum velocity of 294 meters per second. Accuracy is enhanced by a set of fins that open after the initial launch. These fins have a canted surface which spin the rocket and provide improved stability in flight.



The warhead uses the shaped charge effect to penetrate the target. When the warhead is detonated a small core of metal forms and burns through the armor. There is no explosive action after the core penetrates and often the core will continue out the other side of a target. The warhead can punch a hole 2 inches in diameter through more than 11" of armor. If the warhead can be detonated before it hits the target, penetration is reduced according to the distance of the stand-off detonation. The warhead can be detonated by almost any type of material, including concertina wire and chain link fencing. In some cases the protective "screen" will electrically dud the warhead and prevent detonation. This happens because the nose fuse of the round passes through the screen without striking a strand. However, this will bend the metal ogive on the warhead against the inner cone. This cone carries the firing signal from the nose fuse to the base detonator and shorts when the ogive touches the cone. When this happens, the round will dud.

Night vision devices can be mounted on the RPG-7 launcher for low light conditions.

