ELECTRONICS & DEFENSE

SERIES 20 APS
ATTACK PERISCOPE SYSTEM

- Stealthy features
- High-Performance optics
- Optronic sensors
- Electronic warfare/GPS

SAFRAN
Highly reliable, the Series 20 APS attack periscope system provides outstanding optical performances to all types of modern submarines, whether classic or nuclear, new or retrofit platforms. This advanced system covers all the above water surveillance and attack requirements: navigation safety, intelligence gathering and electronic warfare self-protection.

Thanks to its modular design, the Series 20 APS can combine high-quality direct optical channel with 4 magnifications and the latest technology optronic sensors with GPS/ESM-EW antennas. In addition, the periscope includes a low head diameter and stealthy features.

Technical specifications

**Mechanical**
- Tube diameter 190.5 mm
- Torque drive and torque assist

**Optical channel**
- x 1.5 x 3 x 6 x 12
- High transmission
- Optical filters

**Optronic sensors**
- Low Light Level TV anti-blooming camera
- HDTV color camera

**Optional optronic sensor**
- IR camera

**Supported antennas**
- GPS
- Early Warning ESM

**Main functions**
- 1-axis (option 3-axis) line-of-sight stabilization
- Stadimetric range measurement
- True and relative bearing output to weapon system
- Hoisting system control
- Remote control from CMS
- Digital video and snapshot recording
- Built-in test equipment