

# APEM

www.apem.com

COMPACT, RUGGED, AND INTUITIVE SOLUTIONS DESIGNED FOR SEAMLESS, GLOVE-FRIENDLY USE IN THE HARSHTEST OPERATIONAL CONDITIONS

## SOLDIER'S EQUIPMENT

Soldier's equipment solutions must combine lightness, durability, intuitive use, and discreet, ergonomic integration to support effective operation in demanding environments.

1

### GOGGLES WITH NIGHT VISION



**THUMBSTICKS:** TS series, NV series (activated by the index)



**PUSHBUTTONS:** IP series, IS series



**PCB TACTILE SWITCH:** 5G series



**SEALING BOOT:** U5 series



**INDICATOR LED NIVS:** QRM-NV series



**TOGGLE SWITCH:** 11000

2

### TACTICAL RADIO HEADSET



**PUSHBUTTONS:** IA series, 13000 series

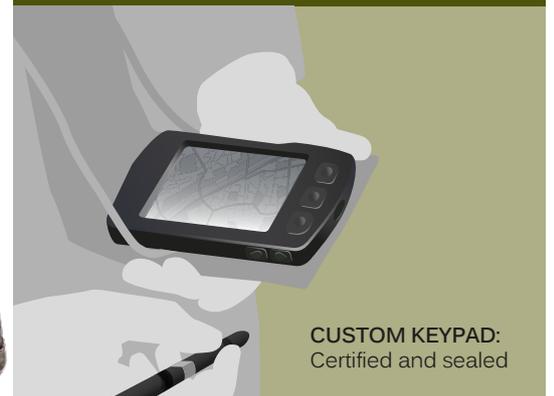


**12000X778 TOGGLE SWITCH:** CECC and MIL approved



3

### UAV/ UGV COMMAND SCREEN



**CUSTOM KEYPAD:** Certified and sealed

4

### WEAPON COMMAND KEYPAD



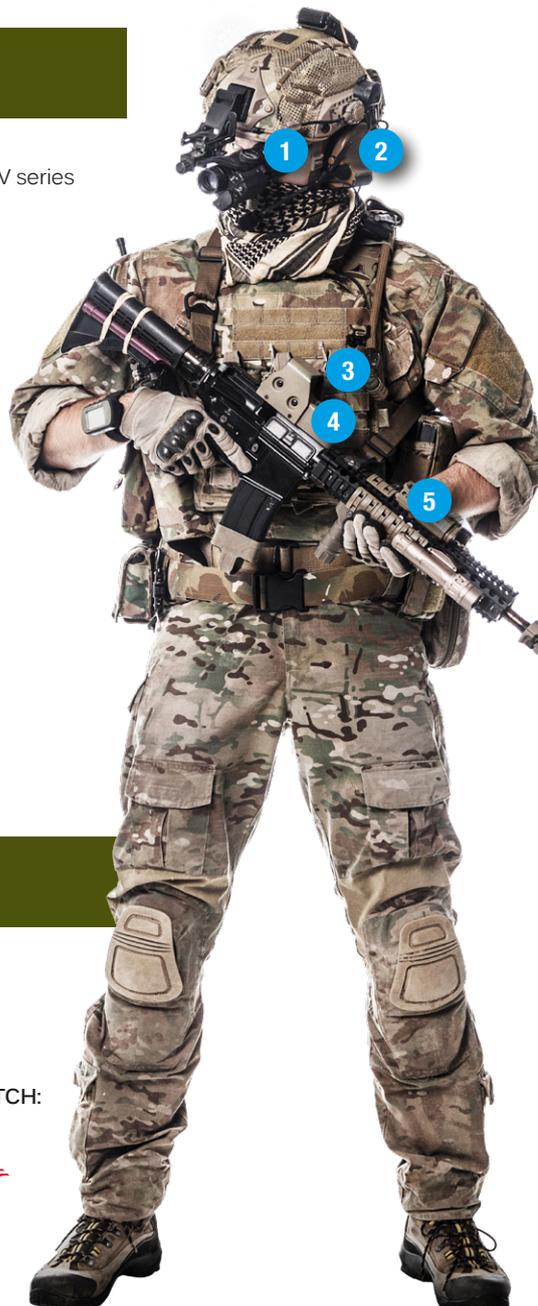
**CUSTOM KEYPAD:** Ergonomic and compact

5

### RIFLE OPTICAL SIGHT



**PCB TACTILE SWITCH:** 5G series



# SOLDIER'S EQUIPMENT

## COMBAT-PROVEN HMI EQUIPMENT

A soldier's equipment must be built around efficiency, resilience, and absolute reliability. Any HMI integrated into this gear has to remain **lightweight**, so it does not add unnecessary burden during long missions. It must also be **highly resistant to harsh environments and shocks**, ensuring it functions flawlessly in rain, dust, heat, or under impact.

Because a soldier often works under stress, the system must offer **practical and intuitive operation**, allowing fast decisions without

hesitation. It also needs to be fully glove-friendly, maintaining precision and responsiveness even with thick protective equipment.

Good ergonomics are essential to support comfort and ease of use, while discreet integration ensures the HMI blends seamlessly with the rest of the gear, avoiding detection or interference. Finally, a compact **under-panel size** is critical to keep the overall system unobtrusive and compatible with modern compact equipment layouts.

Navigators		PCB switch	LED indicator	Panel switches					
									
TS	NV	5G	QRM-NV	13000	IA	IP	IS	12000X778	11000
IP67	IP69K	IP67	IP67	IP67	IP67	IP67	IP67	IP67	-
1M lifecycle	1M lifecycle	10M lifecycle	100,000 hours	150,000 lifecycle	1M lifecycle	1M lifecycle	1M lifecycle	150,000 lifecycle	150,000 lifecycle
Main features									
Analog, PWM or USB output	Shock, vibration & salt spray resistant	Actuation force: 2.0 N, 3.5 N, 6.5 N	Ø 6mm, Ø 8mm, Ø 14mm rear panel mount	Momentary pushbutton switches	Wide variety of actuator colors	Variety of terminal options	Behind panel depth of 13mm (.512)	4 A 30 VDC Pinned lever	Threaded bushing Ø 6.35 mm
Pushbutton option	Compact and low profile behind panel	Available with NO or NC/NO	NVIS Compliant	PC and panel mount models	Low profile pushbutton	Flat round actuator for optional marking	Tactile feedback	Double shell case	Several front panel sealing options

## KEYBOARD CUSTOMIZATION EXPERTISE

The keyboard customization capability is based on strong expertise across different technologies and varying levels of technical know-how. This enables compliance with military specifications, with design choices that account for harsh and complex operating environments.

In addition, retrofit solutions allow existing equipment to be upgraded or adapted without full replacement, ensuring continued performance, reliability, and operational readiness.



**APEM**  
an IDEC company

Please reach your regular APEM sales contact or visit [apem.com](http://apem.com).

[www.apem.com](http://www.apem.com)