



Specifications		EF400	EF500	EF500R
PHYSICAL CHARACTERISTICS	Dimensions	136 x 68 x 15.4 mm	155.6 x 77.95 x 16.5 mm	162.5 x 77.95 x 21.45 mm
	Weight	200 g	260g	330g
	Display	4.0 in WVGA(800 X 480)	5 in. HD (1280 x 720);	5 in. HD (1280 x 720);
	Imager Window	Corning Gorilla Glass 3	Corning Gorilla Glass 3	Corning Gorilla Glass 3
	Touchpanel	Glove, Wet touch	Full touch(glove, wet, stylus)	Full touch(glove, wet, stylus)
	Backlight	LED backlight	LED backlight	LED backlight
	Power	Standard: 3,000 mAh Extended: 6,000 mAh	3200 mAh / 6400 mAh Hot-Swap	3200 mAh / 6400 mAh Hot-Swap
	Expansion Slot	MicroSD	Micro SD	Micro SD
	SIM / SAM	1 Micro SIM	2 SIM / 1 SAM	2 SIM / 1 SAM
	Interface	Micro USB	Micro USB 2.0	Micro USB 2.0
	Notification	Audible tone; multi-color LEDs; vibration	Audible tone; multi-color LEDs; vibration	Audible tone; multi-color LEDs; vibration
	Keypad	On-screen keypad	On-screen keypad	On-screen keypad
	Voice and Audio	1 speaker, 2 mics, 3.5mm ear jack, PTT	Dual noise-cancelling microphones; High-quality speaker phone; 3.5mm headset jack	Dual noise-cancelling microphones; High-quality speaker phone; 3.5mm headset jack
Fingerprint	NA	자가인식+타인인식(optional)	자가인식+타인인식(optional)	
PERFORMANCE CHARACTERISTICS	CPU	1.2 GHz Quad Core	1.2 GHz Quad Core Processor	1.2 GHz Quad Core Processor
	Operating System	WE8.1H, Android 5.1	Android 5.1; WE8.1H	Android 5.1; WE8.1H
	Memory	2GB RAM / 8GB ROM	2 GB RAM / 8 GB eMMC	2 GB RAM / 8 GB eMMC
USER ENVIRONMENT	Operating Temp.	-10°C to 50°C	-20°C to 60°C	-20°C to 60°C
	Storage Temp.	-40°C to 70°C	-25°C to 70°C	-25°C to 70°C
	Humidity	95% non-condensing	95% non-condensing	95% non-condensing
	Drop Spec.	1.8m to concrete	1.2m drop per MIL-STD 810G	2.4m drop per MIL-STD 810G
	Tumble Spec.	300 1.6 ft./0.5 m tumbles; With protective boot: 1000 1.5 ft./0.5 m tumbles; meets and exceeds IEC tumble specification	2,000 1.0 m tumbles; meets and exceeds IEC tumble specifications	2,000 1.0 m tumbles; meets and exceeds IEC tumble specifications
	Sealing	IP67	IP67 Sealing	IP67 Sealing
	Vibration	NA	NA	NA
	Thermal Shock	NA	NA	NA
	Electrostatic Discharge (ESD)	+/-15kVdc air discharge +/-8kVdc direct discharge +/-8kVdc indirect discharge	+/-15kVdc air discharge +/-8kVdc direct discharge +/-8kVdc indirect discharge	+/-15kVdc air discharge +/-8kVdc direct discharge +/-8kVdc indirect discharge
	COMMUNICATION AND	NA	PTT function	PTT function
SENSOR	Light Sensor	Ambient Light	Ambient Light	Ambient Light
	Motion Sensor	Proximity, Gyro, Accelerometer, Magnetic	Proximity, Gyro, Accelerometer, Magnetic	Proximity, Gyro, Accelerometer, Magnetic
DATA CAPTURE	Scanning	1D/2D imager	2D Imager(SE4710)	2D Imager(SE4710)
	Camera	13MP / 1.3MP with flash	Rear: 13 MP f/2.4 aperture with LED flash; Front: 1.3 MP	Rear: 13 MP f/2.4 aperture with LED flash; Front: 1.3 MP
WIRELESS WAN DATA AND VOICE	RFID	NFC	O	O
	Radio Frequency Band	4G 3G 2G	LTE HSPA+: BAND1,2,3,5,8 GSM/GPRS/EDGE: 850/900/1800/1900	LTE HSPA+: BAND1,2,3,5,8 GSM/GPRS/EDGE: 850/900/1800/1900
	GPS	A-GPS, GLONASS	AGPS	AGPS
	Radio	802.11 a/b/g/n	802.11 a/b/g/n/d/h/i	802.11 a/b/g/n/d/h/i
WIRELESS LAN	Data Rates	802.11a – up to 150 Mbps; 802.11b/g – up to 72.2 Mbps; 802.11n @ 2.4 GHz up to 72 Mbps; 802.11n @ 5 GHz up to 150 Mbps	5GHz: 802.11a/n 2.4GHz: 802.11b/g/n	5GHz: 802.11a/n 2.4GHz: 802.11b/g/n
	Security and Encryption	WEP (40 or 104 bit) ; WPA/WPA2 Personal; WPA/WPA2 Enterprise — EAP-TTLS (PAP, MSCHAP, MSCHAPv2), EAP-TLS, PEAPv0-MSCHAPv2, PEAPv1-EAP-GTC, TKIP, AES	WEP (40 or 104 bit) ; WPA/WPA2 Personal (TKIP, and AES); WPA/WPA2 Enterprise (TKIP, and AES) — EAPTTLS (PAP, MSCHAP, MSCHAPv2), EAP-TLS, PEAPv0- MSCHAPv2, PE APv1-EAP-GTC, EAP Fast and LEAP	WEP (40 or 104 bit) ; WPA/WPA2 Personal (TKIP, and AES); WPA/WPA2 Enterprise (TKIP, and AES) — EAPTTLS (PAP, MSCHAP, MSCHAPv2), EAP-TLS, PE APv0- MSCHAPv2, PE APv1-EAP-GTC, EAP Fast and LEAP
WIRELESS PAN	Bluetooth	BT 4.0 LE	BT4.0 LE	BT4.0 LE
PAYMENT	MSR	NA	NA	NA
Accessory	In-box	Battery, USB cable	Battery, Battery Cover, USB cable	Battery, Battery Cover, USB cable
	Additional	1/4 slot charging or ethernet cradle, Snap-on, Vehicle charger, Power adapter, Adapter plug, AC power cord, Holster, Stylus	1/4 slot charging or ethernet cradle, Handstrap, Vehicle charger, Power adapter, Adapter plug, AC power cord, Holster, Serial cable, Stylus	