

## Battery capacity calculation table FX / Intellia

		Pcs	Standby current mA	Alarm current mA	Standby current mA	Alarm current mA
<b>Panels and options</b>	FX, FXL and FXM (incl. MC and UI)	0	65	1 05	0	0
	FXS (incl. MC and UI)	0	60	1 00	0	0
	Ethernet configured	1	1 35	1 71	1 35	1 71
	Ethernet configured 'Not in use'	0	1 14	1 47	0	0
	Ethernet configured	0	1 25	1 61	0	0
	Ethernet configured 'Not in use'	0	1 01	1 37	0	0
	ALCA	0	54	54	0	0
	ALCB	1	78	78	78	78
	CLC	0	20	20	0	0
	current consumption/line	0	5,6	60	0	0
	current consumption/line	0	8,1	60	0	0
	current consumption/line	0	15,6	60	0	0
	IOCC	0	20	20	0	0
	OCA	1	3	3	3	3
	SAA	0	20	20	0	0
	SAB	0	40	40	0	0
	SAC	0	60	60	0	0
	REPX-OB	0	40	40	0	0
	MCOX-OB	0	40	40	0	0
	Current of 1 LED is ~1mA, in this calculation it is assumed that there is fire indicated in one FX panel	0	1	2	0	0
	Current of 1 LED is ~1mA, in this calculation it is assumed that there is fire indicated in one zone	0	1	2	0	0
	FX-LB80	0	1	2	0	0
	CFD-900	0	75	1 20	0	0
<b>Total, Panels and options</b>					2 16	2 52
<b>Devices that are powered from the FX panel</b>	FMP	0	22	42	0	0
	FMPX	0	40	75	0	0
	MCO	0	25	25	0	0
	MCOX	0	50	50	0	0
	REP	0	25	25	0	0
	REPX	0	50	50	0	0
	MPO	0	1 15	1 15	0	0
	IAS1	0	3 00	3 00	0	0
	ZLPX	0	50	72	0	0
	ME775A-FSP	0	10	10	0	0
	ME605A-FST	0	7	7	0	0
	TCF-142-M	0	37	37	0	0
	TCF-142-S	0	80	80	0	0
	Modem adapters	1	20	20	20	20
	CODIS/CODINET	0	0	0	0	0
	Other devices eg. Fire transmitter – conv fire alarm devices...	0	0	0	0	0
		0	0	0	0	0
		0	0	0	0	0
		0	0	0	0	0
		0	0	0	0	0
		0	0	0	0	0
		0	0	0	0	0
		0	0	0	0	0
		0	0	0	0	0
		0	0	0	0	0
		0	0	0	0	0
<b>Total, External devices</b>					20	20
<b>Detectors</b>						
Ion smoke detector	EDI-10	0	0,5	(3,5)*	0,0	0,0
Optical smoke detector	EDI-20	41	0,4	(3,4)*	16,4	16,4
Photo -thermal detector	EDI-30	0	0,5	(3,5)*	0,0	0,0
Thermal detector	EDI-50	0	0,5	(3,5)*	0,0	0,0
CO detector	EDI-60	0	0,5	(3,5)*	0,0	0,0
Configurable Carbon Monoxide Heat Multisensor	58000-305APO	0	0,5	(3,5)*	0,0	0,0
Short circuit isolator base	EBI-11	5	0,4	(4,0)*	2,0	2,0
Base Mounted Flame Detector UV	55000-022APO	0	2,3	4,2	0,0	0,0
Base Mounted Flame Detector UV/Dual IR	55000-023APO	0	2,8	4,2	0,0	0,0
Base Mounted Flame Detector Triple IR	55000-024APO	0	2,5	4,2	0,0	0,0
Beam detector	55000-268APO	0	5,0	(9,0)*	0,0	0,0
Beam detector	55000-273APO	0	5,0	(9,0)*	0,0	0,0
Flame detector	55000-280APO	0	2,2	(4,2)*	0,0	0,0
<b>Call points</b>						
Manual call point with isolator	EPP-20A	6	0,1	(4,0)*	0,6	3,6
Waterproof manual call point with isolator	EPP-22A	0	0,1	(4,0)*	0,0	0,0
Manual call point, with isolator	EPP-20	0	0,3	(5,0)*	0,0	0,0
Manual call point, with isolator	EPP-21	0	0,3	(5,0)*	0,0	0,0
<b>Alarm devices</b>						
Sounder VAD base with isolator Discovery, 45681-700APO	Volume level 7 (90dB(A))	0	0,5	8,5	0,0	0,0
Sounder VAD base with isolator XP95	45681-705APO	0	0,3	9,0	0,0	0,0
VAD base with isolator, beacon base	45681-709APO	0	0,3	9,0	0,0	0,0
Base sounder	ESI-10 (85dB)	0	0,1	3,0	0,0	0,0
	ESI-10 (70dB)	0	0,1	1,3	0,0	0,0
Addressable base sounder, with isolator	ESI-20 (91dB)	0	0,3	5,0	0,0	0,0
	ESI-20 (78dB)	0	0,3	2,1	0,0	0,0
Addressable base sounder	ESI-30 (91dB)	0	0,3	5,0	0,0	0,0
	ESI-30 (78dB)	0	0,3	2,1	0,0	0,0
Addressable sounder (100dB)	ESI-40 (100dB)	0	1,2	5,0	0,0	0,0
	ESI-40 (92dB)	0	1,2	3,1	0,0	0,0
Addressable sounder (100dB)	ESI-50 (100dB)	2	1,2	5,0	2,4	10,0

	ESI-50 (92dB)	0	1,2	3,1	0,0	0,0
Addressable sounder (92/100dB)	ESI-52 (92/100dB)	0	0,3	5,0	0,0	0,0
Addressable sounder beacon (92/100dB)	ESI-53 (92/100dB)	0	0,3	8,0	0,0	0,0
Addressable beacon	ESI-54	0	0,3	3,1	0,0	0,0
Sounder strobe, with isolator	ESI-60 (91dB)	5	0,3	8,0	1,5	40,0
	ESI-60 (78dB)	0	0,3	2,1	0,0	0,0
Sounder strobe	ESI-70 (91dB)	0	0,3	8,0	0,0	0,0
	ESI-70 (78dB)	0	0,3	2,1	0,0	0,0
Beacon base	ESI-80	0	0,2	3,0	0,0	0,0
Configurable Open area sounder beacon	Volume level 7 (100dB(A))	0	0,5	8,5	0,0	0,0
Configurable Sounder beacon base	Volume level 7 (90dB(A))	0	0,4	8,5	0,0	0,0
<b>Control and monitoring devices, Surface mount models</b>						
Monitor module, 1 input	EMI-310	0	1,0	(4,0)*	0,0	0,0
Monitor module, 1 input	EMI-310+	0	1,0	(4,0)*	0,0	0,0
Conventional zone module	EMI-310/CZ	0	6,0	21,0	0,0	0,0
Control module, 1 input, 1 output	EMI-311	0	1,3	(5,5)*	0,0	0,0
240V Relay control unit	EMI-311/240	0	1,5	5,0	0,0	0,0
Control module, 1 output	EMI-301	4	0,4	1,8	1,6	7,2
Sounder control module	EMI-301/S	0	1,7	50,0	0,0	0,0
Mini control module, 1 input	Mini Switch Monitor	0	0,2	(6,4)*	0,0	0,0
I/O module, 1 input, 1 output (3 relay contacts in parallel)	EMI-333	0	3,0	(7,5)*	0,0	0,0
<b>Control and monitoring devices, DIN-rail models</b>						
Isolator module, 2 isolators	EMI-400	0	0,5	4,0	0,0	0,0
Monitor module, 1 input	EMI-410	0	0,7	(3,4)*	0,0	0,0
Control module, 1 input	EMI-410+	0	1,0	(5,6)*	0,0	0,0
Conventional zone module	EMI-410/CZ	0	6,0	21,0	0,0	0,0
I/O module, 1 input, 1 output	EMI-411	0	1,2	(6,0)*	0,0	0,0
Control module, 1 output	EMI-401	0	0,7	3,3	0,0	0,0
Sounder control module	EMI-401/S	0	1,9	50,0	0,0	0,0
<b>Xpander Wireless</b>						
Xpander Loop Interface (31 addresses)	Xpander	0	15,0	15,0	0	0
Remote LED (output from detector limited to 5mA)	ERI-10	10	0	5,0	0	25
Device LED alarm current (max 5 devices with LEDs on at the same time)*						17,5
<b>Total number of field devices</b>		<b>73</b>				
<b>Loop components in total</b>					<b>25</b>	<b>1 22</b>
<b>Current consumption in total</b>					<b>2 61</b>	<b>3 94</b>
Battery capacity = (L1 x T1 + L2 x T2) x 1,25 Ah						
L1 = Standby current		0,3 A				
T1 = Battery backup time		30 h				
L2 = Alarm device current		0,4 A				
T2 = Alarm time		0,5 h				
			<b>Battery capacity</b>		<b>10,0 Ah</b>	
			Charge time (hours)		2,4 h	
			<b>Chosen Battery capacity</b>		<b>12,0 Ah</b>	
			Backup time with chosen batteries		36,1 h	
			(Actual standby time)			