



# Formula 660-E, 660-E/RF

## Pen Terminal

### FEATURES

- Pocket-sized
- Very light weight (160 g)
- Large data and programme memory capacity and "Overspeed" capability
- Fast batch & wireless communication
- 100% compatible with STAR-System™
- Conformance with the European ETSI standard EN 300 220-3
- Excellent price/performance ratio

### APPLICATIONS

- Order management
- Document and asset tracking
- Time and attendance information
- Quality & Security control
- Market research
- Warehouse management

### GENERAL DESCRIPTION

The **F660-E**, weighing only 160 g and measuring just 16.6 cm long, fits easily into a pocket. Compact, light, portable and fully programmable, the **Formula 660-E** batch terminal represents the professional entry-level solution for reading bar codes.

The **F660-E** is able to solve the most complex application needs thanks to 512 KB RAM memory to manage large databases and 512 KB Flash memory for application programs of large dimensions. Furthermore, the "overspeed" capability boosts the software performance, thus increasing operator productivity.

The wide backlit LCD display, with 4 lines and 16 characters, clearly shows much information while the practical 23-key alphanumeric keyboard allows data to be input very quickly.

In order to fully meet customer requirements, software developers can easily customize any application by using the optional EasyGen™ Application Generator or the DS for Formula™ software packages.

The **F660-E/RF** terminal is 100% compatible with Datalogic STAR-System™, the RF narrow band solution for mobile applications (**F660-E/RF** and STAR-System™ conform with the European ETSI standard EN300 220-3).

The STAR & Play™ pre-loaded software utility makes it possible to be immediately operative on the field, and thanks to its high speed RF module, data collection operations are faster than ever. The high capacity Ni-MH long life batteries and the professional belt holster, included as standard accessory, let the operator feel more comfortable and safe when carrying/using the unit.

**F660-E/RF** represents an excellent solution for many situations requiring low-cost efficient scanning and wireless real-time data communication: one of the most successful applications is in restaurants, where it is used to take orders at tables.



# MODELS AND ACCESSORIES

PRODUCT	DESCRIPTION	ORDER NO.
F660-E/512	F660-E Enhanced Pen Terminal 512KB	940304040
F660-E/RF 512	F660-E/RF Enhanced Radio Pen Terminal 512KB	940354000
<b>ACCESSORIES</b>		
STARGATE™	STARGATE™ RF433MHz Base Station	946104060
F951/C	Battery Charger	94A15400X
F951	Transceiver/Charger - RS232 / RS485	94A15401X
F951 DARK	Transceiver/Charger DARK - RS232 / RS485	94A15106X
F950/4/C	Battery Charger - 4 slots	94A15402X
F950/4	Transceiver/Charger - 4 slots - RS232 (x1) / RS485 (x4)	94A15403X
F950/4/RS232	Transceiver/Charger - 4 slots - RS232 with NCK for RS485	94A15404X
FCB232 D 9 F	Transceiver RS232 serial cable for PC (9-pin type D Female) 2 m	94A054000
F902	T-Box	94ACC4020
NCK RS485	Network/PC connection kit	94ACC400X
FCB485 SYS	RS485 serial connection cable for SYSNET 2m	94A054020
FCB EAV	Eavesdrop cable kit 2+2 m	94A054030
FBK660	Battery Kit Ni-CD F660	94ACC4180
FBS660	Battery Kit Ni-CD F660 (5PCS)	94ACC4190
FBK660-E	Battery Kit Ni-MH F660-E	94ACC1263
FBS660-E	Battery Kit Ni-MH F660-E (5PCS)	94ACC1264
BEH6xx/73x	Belt Holster F6xx/F73x with swivel	94ACC1268
DS FOR FORMULA™	Development system for Formula Basic Line	94A104860
CA51	Compiler 8051 Compiler kit V6 for F6xx and F7xx	94A104890
EASYGEN™	Easy application generator package for Formula batch terminals: F660, F725, F732, F734	94A104850
UTILITY TOOLS FULL PACK ADV. ED.	F660 Software package for Windows 95, 98, NT	94A104150

X=1 - power supply for USA; 2 - power supply for Europe; 4 - power supply for UK; 5 - power supply for Australia

## SPECIFICATIONS

OPERATIVE SYSTEM	Datalogic proprietary
PROCESSOR	8 bit CMOS
PROGRAMME MEMORY	512 KB Flash dedicated to the application program
DATA MEMORY	512 KB RAM for data
DISPLAY	Graphic high-contrast LCD with backlight
SCREEN FORMAT	4 lines x 16 characters
KEYBOARD	Alphanumeric with 23 silicon rubber keys
SIGNAL TO OPERATOR	Bicolour LED; Piezoelectric buzzer; programmable frequency and duration
CLOCK/CALENDAR	Quartz controlled RTC; programmable date and time
INTEGRATED SCANNER	660 nm red-light optical pen
MINIMUM RESOLUTION	0.18 mm (7 mils)
BAR CODES	EAN 8, EAN 13, UPC/A-E, 2/5 family, Code 128, Code 93, Code 2/7, Code 3/5, 3/9 family, MSI, DELTA A IBM
RADIO COMMUNICATION	
RADIO FREQUENCY	433.92 MHz
RADIO POWER OUTPUT	<10 mW
RADIO RANGE*	50 m (164 ft)
DATA TRANSFER RATE	up to 19,200 baud
CONFORMITY	European ETSI standard EN 300 220-3
SERIAL COMMUNICATION	Infrared (via optocoupler) between F660-E and F951 or F950/4, RS232 or RS485 between F951 or F950/4 and PC or Host
	Transmission speed: up to 57,600 baud

\* The radio range depends on the environment characteristics

POWER SOURCE	Batch model	400 mA/h Ni-CD rechargeable batteries
	RF model	550 mA/h Ni-MH rechargeable batteries
AUTONOMY		43 h, with reading every 45"
BATTERY CHARGING		Via Formula 951 single slot Transceiver/Charger or Formula 950/4 multiple slot Transceiver/Charger
DIMENSIONS (LxWxH)		166 x 44 x 22 mm (6.6 x 1.7 x 0.87 in)
WEIGHT		Batch model 160 g (5.65 oz)
		RF model 175 g (6.17 oz)
OPERATING TEMP.		0 to 50 °C (32 to 122 °F)
DROP RESISTANCE		Resists several drops onto concrete
ENVIRONMENTAL PROTECTION		Industrial, protected against dust and water

## ACCESSORIES



STARGATE™ RF Base Station



DS for Formula™ Package



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We reserve the right to make modifications and improvements

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