

# F4 Fence Controllers

A single high voltage platform that does everything from simple single fence zone protection to complex multi-controller, multi technology, fully networked solutions.

## Gallagher F4 Fence Controllers Features

### Two configurations

Deployable as a stand-alone fence controller (for use with an alarm panel), or as a fully networked controller with a full suite of integrated capabilities. Configurations can be changed easily with an onboard switch.

### Dual pulse

The F42 controller can be configured as a single dual pulse zone for greater the deterrent.

### User Interface

The controller has an intuitive visual interface developed to give instant system and fence circuit information.

### Synchronization

Low and high voltage synchronization options allow for safe and compliant operation.

### Low feel voltage

The Low Feel setting allows fence circuits to be monitored while operating at a decreased deterrent level.

### Service mode & magnetic key

Service mode allows an operator to control zones while fault finding and testing. A magnetic key allows historic alarm indications to be cleared and, when in service mode, circuits can also be turned on and off.

### Alarms

The F4 Controllers create alarms for a variety of events, including: fence voltage drop, power supply failure, tamper, over-temperature, and synchronization loss or battery test failure.

### Power management

Enhanced battery management ensures efficient battery charging, extended charge duration, and automatic backup testing.

### Temperature management

Internal sensors continuously monitor temperatures and the F4 Controller will adjust behavior automatically to protect the controller and maintain security.

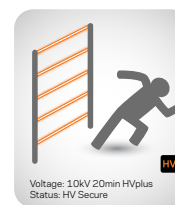
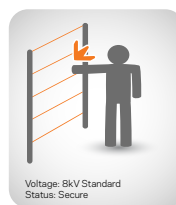
### Cable manager

Optional storage module and cable cover for tidy cabinets.

## HVplus

F4 Fence Controllers are equipped with reactive deterrent technology in the form of HVplus.

When an attack is detected on a fence, the controller will escalate the deterrent level from standard to maximum power with the next pulse. The fence controller will maintain maximum deterrent level for 20 minutes before returning to normal settings.



**F41 Fence Controller**  
G21930 - Single Circuit

**F42 Fence Controller**  
G21950 - Dual Circuit



**Important note on HVplus and insulators**

Due to the higher operating voltages of the F4 while in HVplus mode, the Enhanced Intermediate Insulator (G27706 Hard claw/ G27606 Breakaway) and Pull Through Elevation Strain (G22905) are **required** in these installations. Use of other insulators could potentially lead to HV break-over occurring and an increase in nuisance alarms.



# Technical Specifications

## PART NUMBERS

G21930 F41 Fence Controller	G21963 Magnetic Key	G21961 Power Supply 15V 2.4A (F41 Only)
G21950 F42 Fence Controller	G21965 F-Series Cable Manager	G21962 Power Supply 15V 4.0A (F42 Only)

F4 FENCE CONTROLLERS		F41	F42
Fence Controller	Power Supply Voltage	90 - 265V AC, 50 / 60Hz	90 - 265V AC, 50 / 60Hz
	Power Consumption (mains)	40W	55W
	Software (network only)	Command Centre v7.40 or above	Command Centre v7.40 or above
Aux. DC output		11 - 15V 0.7A (re-settable fuse)	11 - 15V 0.7A (re-settable fuse)
Inputs	4-State balanced inputs	2	3
Outputs	Dry contact relays	4	5
	Max contact rating	1 A at 20V DC / AC RMS	1 A at 20V DC / AC RMS
Communications	Between Gallagher Controller HBUS port and Gallagher F4 Fence Controller	RS485 at 1Mbps/s	RS485 at 1Mbps/s
	Wiring format - data	2 wire	2 wire
	Encryption level	128 bit AES	128 bit AES
Cable distance	F4 Fence Controller to Gallagher Controller 6000	500m (1640ft) maximum (non-shielded twisted pair)	500m (1640ft) maximum (non-shielded twisted pair)
Sync Options		LV	LV/HV
LV Sync Cable Limit		1.2km CAT5e/ Copper, 50km Fibre	
Maximum recommended number of F-Series Controllers per C6000 HBUS port		24	24
Number of fence circuits		1	2
Maximum recommended fence zone length		300m (984ft)*	300m (984ft)*
Maximum HV circuit resistance		300Ω*	300Ω*
* While the energy of this unit allows up to a maximum of 300m (984ft) - the classification of risk, elevations in the fence, and terrain dictate the length of a zone for security evaluation			
Energizer	Output per circuit/per circuit HVplus	2.3J / 3.6J	2.3J / 3.6J
	HV/HVplus Voltage	100% Nom 8.0kV / 10.0kV (wire to earth)*	100% Nom 8.0kV / 10.0kV (wire to earth)*
	HV Dual Pulse/HVplus Dual Pulse		100% Nom 16.0kV / 20kV (-wire to +wire)*
	Low Feel	100% 1.0kV (500Ω)* 10% 0.4kV (500Ω)*	100% 1.0kV (500Ω)* 10% 0.4kV (500Ω)*
	Pulse Rate	1 pulse per 1.5sec*	1 pulse per 1.5sec*
* Default values in stand-alone, and configurable in Command Centre when using network mode			
Temperature range (ambient)	Portrait	-20° to +40°C (-4° to +104°F)	-20° to +40°C (-4° to +104°F)
	Landscape	-20° to +50°C (-4° to +122°F)	-20° to +50°C (-4° to +122°F)
Environmental protection rating		IPX4	IPX4
Internal back up battery	7Ah / 12V DC	5 hours coverage	4 hours coverage
	With no Aux. DC connection	14 hours coverage	10 hours coverage
Compliance standards	C-Tick, FCC, ROHS, CE, SANS 60335-2-76:2006 Edition 2.1 EN 60335-2-76:2005 + A2:2015 (F41 only), AS/NZS 60335.2.76:2003 Edition 2.1 inc A1, A2, A3 IEC 60335-2-76:2002 Edition 2.2 inc A1:2006 + A2:2013		

**RoHS**  
COMPLIANT



## Dimensions

F4 PRODUCT		F41	F42
F4 Controllers	Height x Width x Depth	255 x 340 x 120mm (10 x 13.4 x 4.7in)	255 x 340 x 120mm (10 x 13.4 x 4.7in)
	Weight	2.95 kg (6.5lb)	3.75 kg (8.27lb)
F-Series cable manager	Height x Width x Depth	255 x 112 x 120mm (10 x 4.4 x 4.7in)	

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