



High Country Tek, Inc.

# Hydraulic Fan System Controller — HFS

Electro-Hydraulic Solutions for Mobile, Industrial & Marine Applications.

## Application Information:

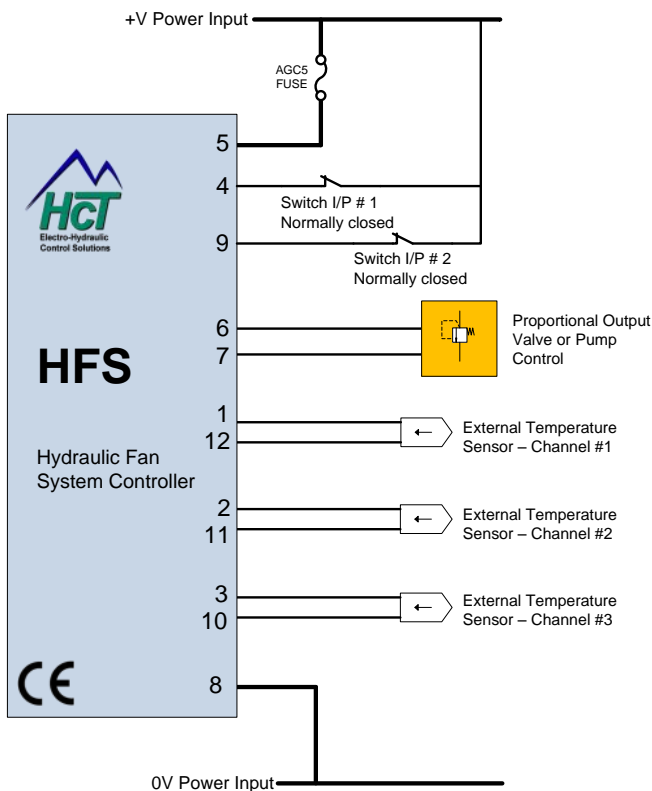
- Optimizes fan speed control relative to temperature requirements.
- **Engines or systems without J1939 capability.**
- Uni-Directional hydraulic fan drive applications.
- OEM, Re-power and Retro-fit opportunities.
- On-road and Off-Road suitable mechanical package.
- Complimentary controller to expand existing system functionality.

## Product Feature Overview:

- Pre-written Windows™ software application, ready for user values.
- **3 x discrete temperature zone sensor inputs**
- Additional 2 x discrete switch inputs for fan speed override ( A/C on e.t.c. )
- 1 x PWM output for any make of proportional valve or pump control.
- Open and short circuit cable protection with monitoring
- Heavy duty industry standard Deutsch connector.
- System 'error' indicator LED with blink code.
- Unit uses Opto 3000 system for set-up and PC communications.



## Electrical Connection Diagram:



## Controller Specification Overview:

- Housing Type:-** HCT unique 'encapsulated' block.
- Input Supply Voltage:** 10 – 32VDC ( Absolute Maximum )
- Input Supply Current:** Valve Current Setting + 200mA Quiescent (Max)
- Command Input Type(s):** 3 x 2 wire Thermistor, temperature switch ( software selectable )  
2 x on/off inputs for fan speed override ( software selectable ).
- Command Input Value(s):** Ohms only ( Max temp = 50 Ω  
Min temp = 2MΩ)  
Additional 2 x Contact closure.
- Dither Frequency :** Software adjustable, ~30 to 250Hz
- Housing Material:-** Black, Polycarbonate
- Wire Connections:-** 12 way male Deutsch—polarized
- Connector type:-** DT15-12PA
- Encapsulation:-** Flameproof epoxy resin
- Mounting:-** 3 x No. 8 ( 5mm ) screws .
- Temperature range:-** - 40 to +75 °C ( operational )
- NEMA/IP Rating:** NEMA 6P/68  
( Module only )  
derate for connector as required.



# Hydraulic Fan System Controller: HFS

## Ordering Guide:

To make certain we offer you the best product for your application, please contact our sales and customer support department at **High Country Tek, Inc.** in California to discuss your project.



Due to time zones, we recommend you use the E-mail address to guarantee a timely response or if you prefer, use the office numbers given below.

Either way, our experienced customer service personnel will be glad to work with you on your order

## Temperature Sensor Specifications:

Supplier / Manufacturer:	Coolant Temperature Sensors:		Air Temperature Sensors:	
	Part Number:	Notes:	Part Number:	Notes:
NAPA Autoparts	ECHTSC200	-	ECHTSC300	-
AutoZone	(0)47131	-	-	-
AC Delco	213-928	-	213-190	-
GM	15326386	Was 12146312	25036751	Was 12110446
Standard	TX3	-	AX1	-
GP Sorensen	TSU81	-	779-19001	-
Niehoff	DR134AK	-	TS83631	Was DR-136W
Wells	SU109	Includes connector	SU107	-
Wells	254	-	235	-
Conductite/Dorman	-	-	-	-
MSD	2310	Includes connector	2320	Includes connector

	
= Supplier	
= Manufacturer	

## Connector Details:

### NOTE:-

View looking at 12 way male connector on HFS controller - DT15-12PA



- Pin 1:- Thermistor #1 +signal input.
- Pin 2:- Thermistor #2 +signal input.
- Pin 3:- Thermistor #3 +signal input.
- Pin 4:- Over-ride Switch #1 I/P.
- Pin 5:- +Vin - 10 – 32VDC Power supply Input.
- Pin 6:- +Proportional Valve Output.
- Pin 7:- -Proportional Valve Output.
- Pin 8:- 0V Power Supply Input.
- Pin 9:- Over-ride Switch #2 input.
- Pin 10:- Thermistor #1 signal common
- Pin 11:- Thermistor #2 signal common
- Pin 12:- Thermistor #3 signal common

### Mating connector Parts:-

- Deutsch # DT06-12SA Plug
- Deutsch # W12S – Lock
- Deutsch # 0462-201-16141 – Socket pins
- Deutsch distributor U.S.:
- Ladd Industrial sales – 1-800-223-1236

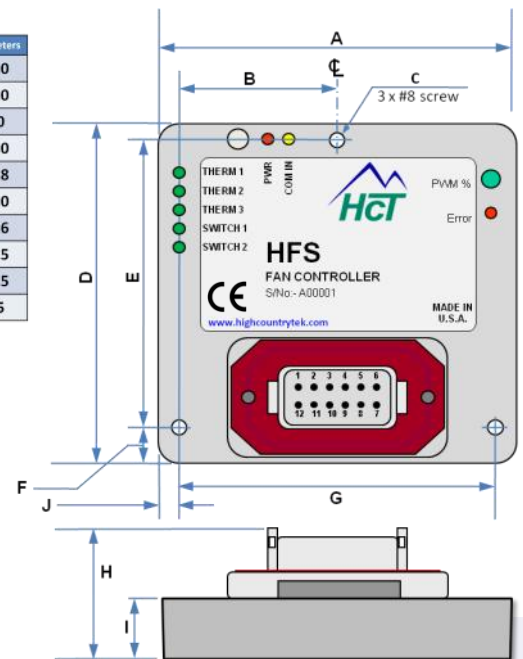
## Dimensional Data:

Label	Inches	Millimeters
A	3.77	96.0
B	1.89	48.0
C	∅ 0.186	5.0
D	3.82	97.0
E	3.10	78.8
F	0.46	12.0
G	3.25	82.6
H	0.16	41.5
I	0.64	16.5
J	0.26	6.5

### Notes:

Unit weight is approx. 250 grams

Not to scale, please contact HCT for exact dimensions



## Need More Information ?

For customer service, pricing, order placement and application support, contact us through E-mail at: [info@highcountrytek.com](mailto:info@highcountrytek.com)

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



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