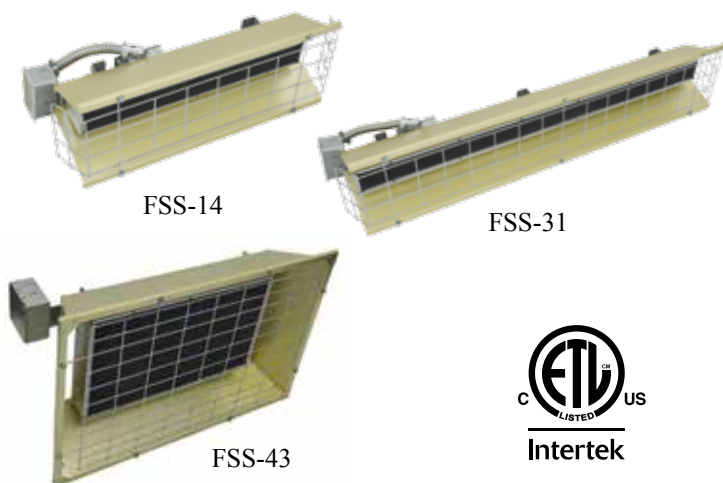


Heavy Duty Overhead Infrared Heaters for Indoor Spot Heating, Zone, or Total Area Heating Applications

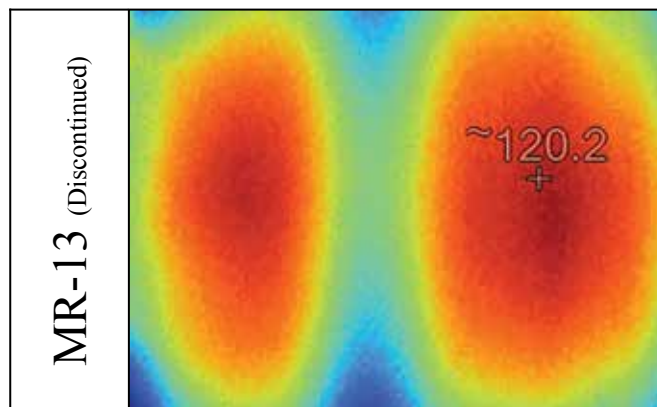
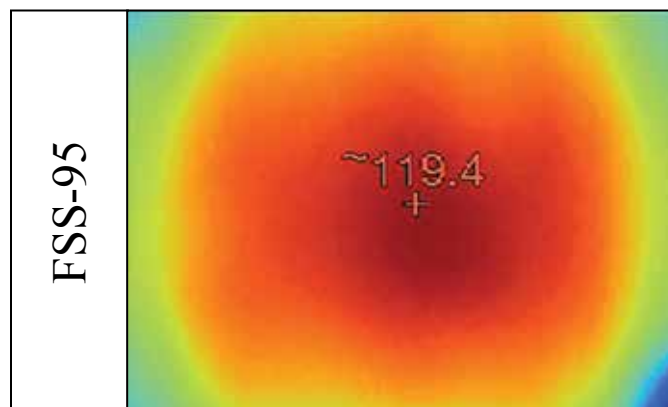


- High-Density medium wave radiant heat, with 60° symmetric heat pattern.
- Approximately 78.5% efficient vs 50% efficiency of metal sheath elements.
- More uniform heat pattern than metal sheath.
- Rugged flat panel emitter, great for high vibration areas.
- Gold anodized Aluminum housing for efficient, long term reflectivity & corrosion resistance.
- Single or three phase wiring on select models.
- "L" brackets included for chain suspension, or rigid mounting.
- Field wiring box mounted on each heater.
- Heavy duty wire guard factory installed.
- 25,000 hour element life expectancy.
- Shipped fully assembled
- Made in U.S.A.

Standard Models

MFG CATALOG NUMBER	MFG MODEL NUMBER	WATTS	VOLTS	PHASE	BTUs / Hr.	AMPS		ELEMENTS PER HEATER	WT. (LBS)	FSS Replacement Elements	
						1-PH	3-PH			MFG CATALOG NUMBER	MFG MODEL NUMBER
04881502	FSS-1412-1	1450	120	1	4947	12.1		1	7	01356002	64337-001
04881602	FSS-1420-1		208	1		6.97				01356102	64337-002
04881702	FSS-1424-1		240	1		6.04				01356202	64337-003
04881802	FSS-1427-1		277	1		5.23				01356302	64337-004
04881902	FSS-1448-1		480	1		3.02				01356402	64337-005
04882002	FSS-1457-1		600	1		2.52				01356502	64337-006
04882102	FSS-3120-1	3150	208	1	10,748	15.14			13	01356602	64337-007
04882202	FSS-3124-1		240	1		13.13				01356702	64337-008
04882302	FSS-3127-1		277	1		11.37				01356802	64337-009
04882402	FSS-3148-1		480	1		6.56				01356902	64337-010
04882502	FSS-3157-1		600	1		5.48				01357002	64337-011
04882602	FSS-4320-3	4300	208	1 or 3	14,672	20.67	11.94		18	01357102	64337-012
04882702	FSS-4324-3		240	1 or 3		17.91	10.36			01357202	64337-013
04882802	FSS-4327-1		277	1		15.52				01357302	64337-014
04882902	FSS-4348-3		480	1 or 3		8.96	5.18			01357402	64337-015
04883002	FSS-4357-3		600	1 or 3		7.48	4.32			01357502	64337-016
04883102	FSS-9520-3	9500	208	1 or 3	32,414	45.67	26.39		31	01357602	64337-017
04883202	FSS-9524-3		240	1 or 3		39.6	22.89			01357702	64337-018
04883302	FSS-9527-1		277	1		34.3				01357802	64337-019
04883402	FSS-9548-3		480	1 or 3		19.8	11.44			01357902	64337-020
04883502	FSS-9557-3		600	1 or 3		16.5	9.54			01358002	64337-021
04883602	FSS95TMK	TANDEM MOUNTING KIT							6		

Infrared Heat Coverage Comparision



Electric Infrared Heating Elements

Clear & Red Quartz Lamps

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MFG CATALOG NUMBER	MFG MODEL NUMBER	WATTS	VOLTS	LENGTH (IN.)		ENVELOPE TYPE	FITS MODEL
				Overall	Heated		
04400502	630-05129	500	120	8 11⁄16	5	CLEAR	MM-13A
04401602	630-16209	1600	208	19 11⁄16	16		222, 223, or MM-24A
04401702	630-16249		240				
04409902	631-16249		240				
04401802	630-16279		277				
04817302	630-16489	2500	480	28 11⁄16	25		342, 343, or MM-33A
04817402	630-25209		208				
04817502	630-25249		240				
04817602	630-25279		277				
04405402	630-25489		480				
04403602	631-25489		480				
04406802	631-25609	3650	600	41 11⁄16	38		462, 463, or MM-46A
04406702	630-36489		480				
04462302	630-38579	3800	600	41 11⁄16	38		462, 463, or MM-46A
04441302	631-38579		600				
04461502	632-1620	1600	208	19 11⁄16	16	RED	222/223
04461602	632-1624		240				or RPH
04462202	632-2548	2500	480	28 11⁄16	25		342 or 343

- Near wavelength infrared, color temp. emitted: approx. 4100° F (high brightness).
- Approximately 96% radiant efficiency.
- Excellent resistance to thermal shock.
- Highest moisture resistance and quickest heat-up time.
- 3/8" Diameter clear or red quartz envelope.
- Coiled tungsten filament; sealed porcelain end caps; halogen gas filled.

Model prefix types:

630 = Horizontal Burning "Clear"

631 = Vertical OR Horizontal Burning "Clear"

632 = Horizontal Burning "Red"

Notes:

Life expectancy of all heating elements - 5,000 hours.
All heating elements operate at 50 / 60 Hertz.

Quartz Tubes

Notes: Life expectancy of all heating elements - 5,000 hours.
All heating elements operate at 50 / 60 Hertz.

MFG CATALOG NUMBER	MFG MODEL NUMBER	WATTS	VOLTS	LENGTH (IN.)		FITS MODEL
				Overall	Heated	
04432302	671-3784	1500	120	39 1/16	34 3/16	OCH-46
04418102	671-5061	2000	208	39 1/16	34 3/16	
04418002	671-3785	2000	240	39 1/16	34 3/16	
04419302	671-5018	2000	277	39 1/16	34 3/16	
04416602	671-5060	3000	208	50 1/16	45 3/16	OCH-57
04414702	671-3786	3000	240	50 1/16	45 3/16	
04419402	671-5059	3000	277	50 1/16	45 3/16	
04419502	671-5058	2250	480	50 1/16	45 3/16	
04403502	671-3454	450	120	12 15/16	8 7/16	FFH-912B
04400802	671-3492*	550	120	19 1/2	16	FFH-512A
04462402	671-5056	1000	120	18 5/16	14 7/16	CH-2212-1C
04462502	671-5057	1425	240	27 3/16	23 7/16	CH-6424-1C

*3/8" Diameter

- Medium wavelength infrared, color temp. emitting approx. 1800°F (bright orange glow)
- Approximately 60% radiant efficiency
- Nickel-Chromium alloy coiled element with porcelain end caps and pigtailed termination
- 5/8" Diameter frosted quartz envelope
- Fast heat-up/cool-down

Flat Panel Emitter Replacement Complete Conversion Kits - MR, CH, & FHK

CH & MR SERIES - FLAT PANEL EMITTER CONVERSION KITS				
MFG CATALOG NUMBER	MFG MODEL NUMBER	WATTS	VOLTS	FOR USE WITH OLD MODEL #:
01358102	64337-022	3150	208	MR-420-1, CH-420-1C, CH-420-3A
01358202	64337-023		240	MR-424-1, CH-424-1C, CH-424-1A
01358302	64337-024		277	MR-427-1, CH-427-1C, CH-427-1A
01358402	64337-025		480	MR-448-1, CH-448-1C, CH-448-1A
01358502	64337-026		600	MR-457-1, CH-457-1C, CH-457-1A
01358602	64337-027	4300	208	MR-620-3, CH-620-3C, CH-620-3A
01358702	64337-028		240	MR-624-3, CH-624-3C, CH-624-3A
01358802	64337-029		277	MR-627-3, CH-627-3C, CH-627-3A
01358902	64337-030		480	MR-648-3, CH-648-3C, CH-648-3A
01359002	64337-031		600	MR-657-3, CH-657-3C, CH-657-3A
01359102	64337-032	9500	208	MR-1320-3, CH-1320-3B, CH-1320-3A
01359202	64337-033		240	MR-1324-3, CH-1324-3B, CH-1324-3A
01359302	64337-034		277	MR-1327-3, CH-1327-3B, CH-1327-3A
01359402	64337-035		480	MR-1348-3, CH-1348-3B, CH-1348-3A
01359502	64337-036		600	MR-1357-3, CH-1357-3B, CH-1357-3A
01359602	64337-037	9500	208	MR-2720-3, CH-2720-3C, CH-2720-3B
01359702	64337-038		240	MR-2724-3, CH-2724-3C, CH-2724-3B
01359802	64337-039		277	MR-2727-3, CH-2724-3C, CH-2724-3B
01359902	64337-040		480	MR-2748-3, CH-2748-3C, CH-2748-3B
01360002	64337-041		600	MR-2757-3, CH-2757-3C, CH-2757-3B
FHK Series - Flat Panel Emitter Conversion Kits				
01360802	64337-049	4300	208	FHK-620-3A
01360902	64337-050		240	FHK-624-3A
01361002	64337-051		480	FHK-648-3A
01361102	64337-052	9500	208	FHK-1320-3A
01361202	64337-053		240	FHK-1324-3A
01361302	64337-054		480	FHK-1348-3A
Note: There are no element replacement kits for CH-2, MR-2, or FHK-2 model series heaters.				

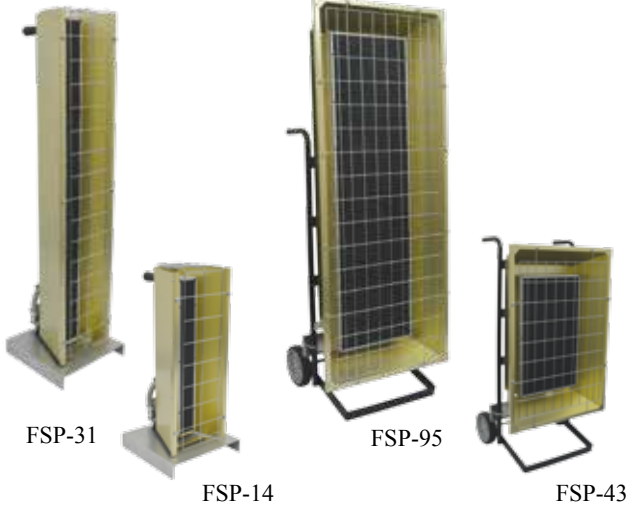
Note: There are no element replacement kits for CH-2, MR-2, or FHK-2 model series heaters.

FSP Series Heavy Duty Flat Panel Emitter Electric Portable Infrared Heater

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Stand Models

Hand Cart Models



- High density medium wave radiant heat with 60° symmetrical heat pattern.
- 25,000 hour element life expectancy
- Approximately, 78.5% efficient versus 50% for metal sheath type elements.
- Rugged flat panel emitter can be used in high vibration areas
- Single or three phase available on select models
- Heavy duty wire guard mounted on long lasting gold anodized reflector
- Made in U.S.A.

Square Feet Heated

KW	NON-PROTECTED AREA		SEMI-PROTECTED AREA		Required Clearance (from front of heater)
	BELOW 35 °F	ABOVE 35 °F	BELOW 35 °F	ABOVE 35 °F	
1.45	25	36	40	50	3 feet
3.15	64	75	90	125	3 feet
4.3	85	100	120	150	4 feet
9.5	192	225	270	375	7 feet

Standard FSP Models

MFG CATALOG NUMBER	MFG MODEL NUMBER	WATTS	VOLTS	PHASE	BTUs / Hr.	AMPS		WT. (LBS)	FSP Replacement Elements		OPTIONAL 25' POWER CORD	
						1 PH	3 PH		MFG CATALOG NUMBER	MFG MODEL NUMBER	MFG CATALOG NUMBER	MFG MODEL NUMBER
04883802	FSP-3120-1	3150	208	1	10,749	15.4	N/A	23	01356602	64337-007	08804600	SO 14/3
04883902	FSP-3124-1	3150	240	1		13.13	N/A		01360202	64337-043	08804600	SO 14/3
04884002	FSP-3127-1	3150	277	1		11.37	N/A		01356802	64337-009	08804600	SO 14/3
04884102	FSP-3148-1	3150	480	1		6.56	N/A		01360302	64337-044	08804600	SO 14/3
04884202	FSP-3157-1	3150	600	1		6.48	N/A		01357002	64337-011	08804600	SO 14/3
04884302	FSP-4320-3	4300	208	1 or 3	14,972	20.67	11.94	32	01361402	64337-055	03164201	SO 12/4
04884402	FSP-4324-3	4300	240	1 or 3		17.91	10.36		01360402	64337-045	08804900	SO 14/4
04884502	FSP-4327-1	4300	277	1		15.52	N/A		01361502	64337-056	08804600	SO 14/3
04884602	FSP-4348-3	4300	480	1 or 3		8.96	5.18		01360502	64337-046	08804900	SO 14/4
04884702	FSP-4357-3	4300	600	1 or 3		7.48	7.48		01357502	64337-016	08804900	SO 14/4
04884802	FSP-9520-3	9500	208	1 or 3	32,414	45.67	26.39	46	01361602	64337-057	08805100	SO 8/4*
04884902	FSP-9524-3	9500	240	1 or 3		39.68	22.89		01360602	64337-047	08805100	SO 8/4*
04885002	FSP-9527-1	9500	277	1		34.3	N/A		01361702	64337-058	08805200	SO 8/3
04885102	FSP-9548-3	9500	480	1 or 3		19.79	11.44		01360702	64337-048	03164201	SO 12/4
04885202	FSP-9557-3	9500	600	1 or 3		16.52	9.54		01362702	64337-063	08804900	SO 14/4

*3 Phase only

Factory Pre-Wired FSP-14 Model With 15 Ft. Cord & Grounded Plug

MFG CATALOG NUMBER	MFG MODEL NUMBER	TYPE	WATTS	VOLTS	PHASE	BTUs / Hr.	AMPS	WT. (LBS)
04883702	FSP-1412-1C	STAND	1450	120	1	4947	12.1	17

Infrared Control Options

MFG CATALOG NUMBER	MFG MODEL NUMBER	DESCRIPTION	Operating Voltage (VAC)	Dimensions (In)			WT. (LBS)
				Ht.	Wd.	Dp.	
04858102	TO-SK-1	Tip-Over Switch	208V - 600V	10.3	10.3	5.0	12
05893702	DC-SK-1	Disconnect Switch	120V - 600V	5.0	6.0	4.0	5
04860202	GF-SK-1	Ground Fault Sensing Switch	208V - 600V	10.3	10.3	5.0	12

Note: All SK-1 Models have NEMA-1 Enclosure, 50-Amp Max. & 1/3-Phase Rated.

Model "TO" & "GF" features include a positive "off" & a built-in on/off rocker switch that glows red during operation. Additionally, enclosure can mount directly to the terminal box on the back of the heater (FSP-43/95 only) or be mounted to a remote wall surface.



TO-SK-1
or GF-SK-1