



Telecommunications



# Keeping you connected

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FG Wilson has been serving the needs of the telecommunication sector for over 50 years, with our diesel and gas generator sets.

Along with our network of 125 Dealers we deliver reliable power product globally and provide expert support locally.

## Extended Service Intervals (ESI)

The FG Wilson telecoms range, powered by Perkins 400 series engines, can offer 1,000 hrs running between services. **Compared to many competitor generator sets (250 hr service interval), this significantly reduces maintenance frequency and overall operating costs.**



# Extended Running Fuel Tanks

Our experience working with major telecoms operators has led us to design long running fuel tanks with added security in mind. We have developed a standard range of 600, 1,000 and 2,000 litre tanks, either single or double walled. Because everyone has different needs, our mechanical engineers can customise these fuel tanks to meet individual requirements.

Each fuel tank is fitted with:

- Sight gauge
- Fuel level monitoring system
- Sloped tank for excess water run off

The FG Wilson offering is particularly suited to remote telecom sites. ESI alongside extended running fuel tanks allow fewer visits for fuel replenishment and generator set servicing, significantly reducing operating costs.

Typical site example:

11 kVA generator operating in a hybrid system - generator set will run for 4 hrs per day @ 75% load to recharge the site batteries.

Fuel replenishment:

P11-6S uses 2.7 litre fuel per hour. 4 hrs per day. Daily usage 10.8 litre

600 litre tank = 55 days  
1,000 litre tank = 92 days  
2,000 litre tank = 185 days

Servicing – 4 hrs per day with 250 days between services




600L tank  
Fuel Replenishment

**55** DAYS



1,000L tank  
Fuel Replenishment

**92** DAYS



2,000L tank  
Fuel Replenishment

**185** DAYS

# Isolated Locations

Many telecom towers are located in remote locations, such as mountain tops. This, combined with limitations in infrastructure and transportation, renders many sites difficult to access.

Our enclosure design includes a strengthened multi point lift capable of lifting a generator set together with up to the 1,000 litre double walled tank.

Where an air lift is required, this allows a single helicopter journey, facilitating an efficient and cost effective installation.





## Control Systems

Flexibility is one of our primary objectives when it comes to your control requirements. Our generators are fitted with the DeepSea DSE4520 control panel as standard, and can be easily upgraded to the DSE7420 control panel.

Alternative customer preference and individual site requirements can be fully accommodated by our engineers who will tailor a package specific to your needs. We frequently incorporate tailored control solutions from suppliers such as Deepsea Electronics, ComAp and Lovato.

All of the aforementioned control equipment suppliers offer remote communication packages, allowing you to monitor and control your equipment from the office or while on the move.

Many control panel packages

now feature smartphone apps that provide access to individual generator set parameters and generate notifications of any issues on site. Advance knowledge of an issue enables you to delegate the appropriate resource, saving wasted visits and ultimately, money.



## On-grid sites

Those sites that primarily run off the grid can use the incorporated ABB load transfer panel, located within the control tower. The panel monitors the mains and upon a mains failure, automatically start the generator and transfer the load to the set.

When there is a healthy mains, the panel will transfer the load back to the grid, and after a cooling down period, shut off the generator. The system is then ready to react to the next potential mains failure.



## Security

As cases of fuel theft and vandalism have increased, security has been an integral element of our product design. One such design feature was to conceal fuel pipework between generator base and fuel tank.

Our telecoms range incorporates enclosure security features to protect your investment and give you peace of mind:

Enclosure security:

- Optional GPS tracking
- Padlockable canopy door



# Telecom applications



## On grid: single unit, back up to the mains

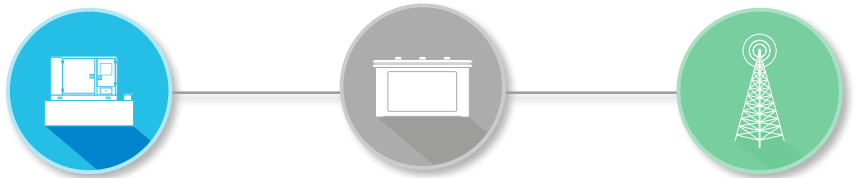
Pros	Cons
Low CAPEX, long equipment service life	High - OPEX



## Off grid: isolated sites

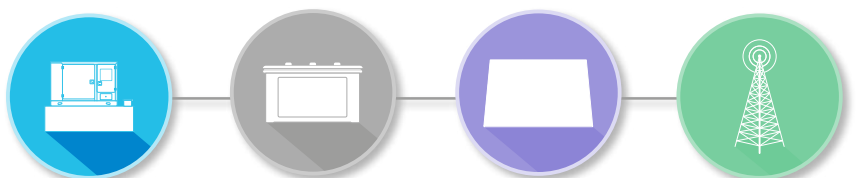
Twin units on cycle timer, no mains

Pros	Cons
Low CAPEX, long equipment service life	High - OPEX, high maintenance frequency



## Generator set and battery hybrid system

Pros	Cons
Low OPEX, low generator running hours, very quick investment turn around, long maintenance intervals	High CAPEX, battery replacement



## Generator set, battery and solar panel hybrid system

Pros	Cons
Very low OPEX, lower generator running hours, quick investment turn around, very long maintenance intervals	Cons - high CAPEX, battery replacement

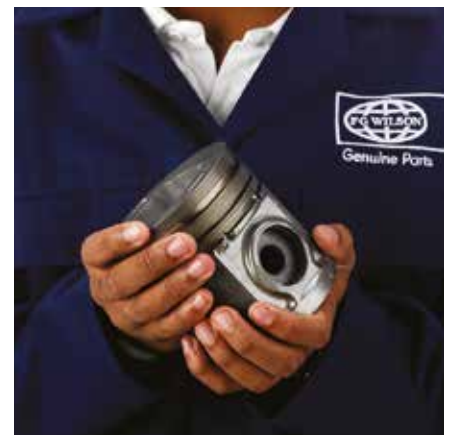


## Local Support

We can meet your power needs wherever you are in the world. Our Global Dealer Network ensures that FG Wilson product is available locally and that customers are expertly supported.

Our Dealers are experts in serving product maintenance needs including emergency breakdown coverage and routine servicing. Equipped with state of the art parts identification and ordering software, FG Wilson Dealers can ensure you have access to the right parts, at the right time with a full warranty.

Together with our Dealers, FG Wilson offers the highest levels of support to each customer – before, during and after each power installation.





# Technical Data



## Generator Set Technical Data

Model	Engine	Alternator	kVA		Fuel Consumption					
			Prime	Standby	50 Hz			60 Hz		
					100%	75%	50%	100%	75%	50%
P7.5-1S	403A-11G	LLB1114D	6.8	7.5	2.6	2.0	1.5	-	-	-
P7.5-4S	403D-11G	LLB1114D	6.8	7.5	2.5	1.9	1.5	2.9	2.2	1.8
P9.5-1	403A-11G	LL1114B	8.5	9.5	2.6	2.0	1.5	-	-	-
P9.5-4	403D-11G	LL1114B	8.5	9.5	2.6	2.0	1.5	3.0	2.2	1.8
P11-6S	403D-15G	LLB1114F	10.0	11.0	3.6	2.7	2.0	4.3	3.3	2.4
P13.5-6	403D-15G	LL1114D	12.5	13.5	3.7	2.8	2.0	4.3	3.2	2.4
P14-6S	404D-22G1	LLB1114L	13.0	14.0	4.3	3.3	2.6	5.2	4.1	3.1
P16-1	403A-15G2	LL1114M	14.5	16.0	4.1	3.0	2.3	4.7	3.3	2.4
P16.5-1S	404A-22G	LLB1114M	15.0	16.5	5.0	3.7	2.8	-	-	-
P16.5-6S	404D-22G	LLB1114M	15.0	16.5	4.9	3.7	2.7	5.7	4.4	3.3
P18-6	404D-22G1	LL1114H	16.5	18.0	4.4	3.4	2.6	5.2	4.0	3.1
P22-1	404A-22G	LL1114M	20.0	22.0	5.4	3.9	2.9	-	-	-
P22-6	404D-22G	LL1114M	20.0	22.0	5.3	3.9	2.9	5.8	4.5	3.3

## Level 1 Enclosure

Model	8 Hour Tank Base				w/ 600L Tank*				w/ 1000L Tank*			
	L	W	H	Kg*	L	W	H	Kg*	L	W	H	Kg*
P7.5-1S	1550	935	1200	382	1550	935	1810	489	2010	1060	1810	562
P7.5-4S	1550	935	1200	382	1550	935	1810	489	2010	1060	1810	562
P9.5-1	1550	935	1200	375	1550	935	1810	482	2010	1060	1810	555
P9.5-4	1550	935	1200	375	1550	935	1810	482	2010	1060	1810	555
P11-6S	1550	935	1200	459	1550	935	1810	566	2010	1060	1810	639
P13.5-6	1550	935	1200	452	1550	935	1810	559	2010	1060	1810	632
P14-6S	1550	935	1200	521	1550	935	1810	628	2010	1060	1810	701
P16-1	1550	935	1200	479	1550	935	1810	586	2010	1060	1810	659
P16.5-1S	1550	935	1200	529	1550	935	1810	636	2010	1060	1810	709
P16.5-6S	1550	935	1200	529	1550	935	1810	636	2010	1060	1810	709
P16.5-1	1550	935	1200	479	1550	935	1810	586	2010	1060	1810	659
P18-6	1550	935	1200	516	1550	935	1810	623	2010	1060	1810	696
P22-1	1550	935	1200	529	1550	935	1810	636	2010	1060	1810	709
P22-6	1550	935	1200	529	1550	935	1810	636	2010	1060	1810	709

\* Dual Wall Tank +107 kg (600L) +160 kg (1000L)

## Level 2 Enclosure

Model	8 Hour Tank Base				w/ 600L Tank*				w/ 1000L Tank*			
	L	W	H	Kg*	L	W	H	Kg*	L	W	H	Kg*
P7.5-1S	1755	935	1200	433	1755	935	1810	540	2010	1060	1810	613
P7.5-4S	1755	935	1200	433	1755	935	1810	540	2010	1060	1810	613
P9.5-1	1755	935	1200	426	1755	935	1810	533	2010	1060	1810	606
P9.5-4	1755	935	1200	426	1755	935	1810	533	2010	1060	1810	606
P11-6S	1755	935	1200	510	1755	935	1810	617	2010	1060	1810	690
P13.5-6	1755	935	1200	503	1755	935	1810	610	2010	1060	1810	683
P14-6S	1755	935	1200	572	1755	935	1810	679	2010	1060	1810	752
P16-1	1755	935	1200	530	1755	935	1810	637	2010	1060	1810	710
P16.5-1S	1755	935	1200	580	1755	935	1810	687	2010	1060	1810	760
P16.5-6S	1755	935	1200	580	1755	935	1810	687	2010	1060	1810	760
P16.5-1	1755	935	1200	530	1755	935	1810	637	2010	1060	1810	710
P18-6	1755	935	1200	567	1755	935	1810	674	2010	1060	1810	747
P22-1	1755	935	1200	580	1755	935	1810	687	2010	1060	1810	760
P22-6	1755	935	1200	580	1755	935	1810	687	2010	1060	1810	760

\* Dual Wall Tank +108 kg (600L) +160 kg (1000L)

## Level 3 Enclosure

Model	8 Hour Tank Base				w/ 600L Tank*				w/ 1000L Tank*			
	L	W	H	Kg*	L	W	H	Kg*	L	W	H	Kg*
P7.5-1S	1830	935	1200	443	1830	935	1810	550	2010	1060	1810	623
P7.5-4S	1830	935	1200	443	1830	935	1810	550	2010	1060	1810	623
P9.5-1	1830	935	1200	436	1830	935	1810	543	2010	1060	1810	616
P9.5-4	1830	935	1200	436	1830	935	1810	543	2010	1060	1810	616
P11-6S	1830	935	1200	520	1830	935	1810	627	2010	1060	1810	700
P13.5-6	1830	935	1200	513	1830	935	1810	620	2010	1060	1810	693
P14-6S	1830	935	1200	582	1830	935	1810	689	2010	1060	1810	762
P16-1	1830	935	1200	540	1830	935	1810	647	2010	1060	1810	720
P16.5-1S	1830	935	1200	590	1830	935	1810	697	2010	1060	1810	770
P16.5-6S	1830	935	1200	590	1830	935	1810	697	2010	1060	1810	770
P16.5-1	1830	935	1200	540	1830	935	1810	647	2010	1060	1810	720
P18-6	1830	935	1200	577	1830	935	1810	684	2010	1060	1810	757
P22-1	1830	935	1200	590	1830	935	1810	697	2010	1060	1810	770
P22-6	1830	935	1200	590	1830	935	1810	697	2010	1060	1810	770

\* Dual Wall Tank +108 kg (600L) +160 kg (1000L)



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

To ensure you stay connected to success make sure you choose FG Wilson for all your telecommunication needs. For further information on the generator range available for telecoms use, please contact your local dealer or visit [www.fgwilson.com](http://www.fgwilson.com) to request a quote.