

ENGINE GAUGES

Senders sold separately, all 2 1/4" gauges come with internal white light. Range marking available, \$15



Temperature 2 1/4", \$70

Part#	Range/Label	Probe	
D1-211-5088	100-250F Oil	V323-095 1/8-27NPT, type 1	\$16.95
		V323-422 5/8-18NPT, type 2	\$24.95
D1-211-5090	120-300F Oil	V323-057 1/8-27NPT, type 1	\$16.95
		V323-061 5/8-18NPT, type 2	\$34.95
		965 530 10mmx1.5, type 2	\$186.29*



*For Rotax 9 series engines, VDO type only
**Connector not included, use part# 864 011



CHT gauge, 2 1/4"
D1-211-5102, 100-600F, \$100
D1-211-5109, 120-300F, \$90
Probes - ring (J) type
PS-211-8154 100-600F 12mm, \$19.95
PS-211-8156 100-600F 14mm, \$19.95
PS-211-8168 100-600F 18mm, \$38.00
Probe - threaded
PS-211-8156 120-300F, 8mm thread (J), \$92
965 530 120-300F, 8mm thread, type 2, \$186.29*



GA

*For Rotax 9 series engines, VDO type only



EGT 2 1/4", \$220
Part# D1-211-5051
Range 250-1650 F
Sender included



Ammeter, \$56
Part# D1-211-5106
60-0-60
Internal shunt
2 1/4"



Pressure 2 1/4", \$70
Single post Range/label Probe, \$39.95
D1-211-5062 0-15 PSI Fuel V360-043, 1/8 npt
D1-211-5063 0-30 PSI Fuel V360-043, 1/8 npt
D1-211-5052 0-80 PSI Oil, V360-003, 1/8 npt 1 post
0-80 PSI Oil V360-410, 1/8 npt 2 post
D1-211-5056 0-100 PSI Oil V360-086, 1/8 npt
D1-211-5058 0-150 PSI Oil V360-004, 1/8 npt, 1 post*
V360-025, 1/8 npt, 2 post
D1-211-5049 0-150 psi oil 956413 (Honeywell)

*Standard equipment replacement on old style 9 series, VDO type only



Voltmeter 2 1/4", \$70
D1-211-5086 8-16V
D1-211-5087 12-31V



OAT, \$129.95
D1-211-5122
-10 F to +120 F
PS-211-8160, 2 1/4"
Probe \$28



2 1/4" Tach/hourmeter, FAA-TSO, \$350
D1-112-5223 2300 RPM
D1-112-5225 2566 RPM
D1-112-5227 2050 RPM
D1-112-5240 Special-Rotax 912



3 1/8" Tach/hourmeter, FAA-TSO, \$260.00
D1-112-5028 1800 RPM
D1-112-5122 2050 RPM
D1-112-5023 2300 RPM
D1-112-5024 2400 RPM
D1-112-5025 2566 RPM
D1-112-5034 3000 RPM



Modular gauges are 1-1/2 inches square and can be stacked in horizontal and/or vertical rows. See mounting frames for arrangements. Specific gauge types can be specified in any position. Modular gauges are internally lighted and are plug removable from the front of the panel for easy maintenance.

Pressure Gauges, \$140

Part#	Range/label	Probe
D1-211-6060	0 - 80 PSI Fuel	PS-211-9002
D1-211-6061	0 - 15 PSI Fuel	PS-211-9000
D1-211-6064	0 - 30 PSI Fuel	PS-211-9000
D1-211-6065	0 - 2 Bar Fuel	PS-211-9000
D1-211-6089	0 - 80 PSI Liquid	PS-211-9002
D1-211-6090	0 - 100 PSI Oil	PS-211-9039
D1-211-6091	0 - 9 Bar Oil	PS-211-9040
D1-211-6092	0 - 150 PSI Oil	PS-211-9040
D1-211-6093	0 - 80 PSI Oil	PS-211-9002
D1-211-6094	0 - 7 Bar Oil	PS-211-9039
D1-211-6095	0 - 5 Bar Oil	PS-211-9002

Temperature Gauges, \$160

D1-211-6063	90 F - 400 F Oil	PS-211-9086 (1/8 NPT)
D1-211-6066	120 F - 300 F Oil	PS-211-8090 (1/8 NPT)
		PS-211-8112 (5/8-18 UNF)
D1-211-6067	40 C - 120 C Oil	PS-211-8044 (1/8 NPT)
		PS-211-8045 (5/8-18 UNF)
D1-211-6068	100 F - 250 F Oil	PS-211-8044 (1/8 NPT)
		PS-211-8045 (5/8-18 UNF)
D1-211-6069	50 C - 150 C Oil	PS-211-8090 (1/8 NPT)
		PS-211-8112 (5/8-18 UNF)
D1-211-6070	30 C - 200 C Oil	PS-211-9086 (1/8 NPT)
D1-211-6088	100 F - 250 F Lq	PS-211-8044 (1/8 NPT)
		PS-211-8045 (5/8-18 UNF)
D1-211-6101	0 F - 1600 F EGT	PS-211-8162 (probe)
		PS-211-8163 (clamp)
D1-211-6102	100 F - 600 F CHT	PS-211-8152 (14mm ring)
		PS-211-8154 (12mm ring)
		PS-211-8168 (18mm ring)
		PS-211-8156 (probe)
		PS-211-8152 (14mm ring)
		PS-211-8154 (12mm ring)
		PS-211-8168 (18mm ring)
		PS-211-8156 (probe)
D1-211-6109	120 F - 300 F CHT	Rotax® Engine Sender

Voltmeter, \$130

D1-211-6086	8 - 16 Volts
D1-211-6087	12 - 31 Volts

Ammeters, require shunt, \$180

D1-211-6104	45 - 0 - 45 Amps	PS-211-9100
D1-211-6106	75 - 0 - 75 Amps	PS-211-9101
	45 amp shunt, not included w/gauge	PS-211-9100, \$57
	75 amp shunt, not included w/gauge	PS-211-9101, \$57

Blank, \$70

D1-211-6010 Blank Filler Module
Uses Oil Temp Connector



Fuel Level,	E-F resist	Probe
D1-211-5072, \$70	0-90 ohm	PS-211-8038, \$70
D1-211-5074, \$70	10-180 ohm	PS-211-8038, \$70
D1-211-5076, \$95	0-30 ohm	
D1-211-5078, \$65	240-33 ohm	

Probes sold separately



Oil Pressure, 2 1/4" \$99.95
No Probe included
 Uses existing probe on Rotax 9 series engine. Please note sender type when ordering.
Gauge
 Honeywell type, #OPASH
 VDO type, #OPASV
Probes
 Honeywell, #956 413/415, \$249
 VDO, V360-004, \$39.95



Oil Temp, 2 1/4" \$99.95
No probe included
 Uses existing probe on Rotax 912UL engine. #OTAS1
 Probe, #965 530, \$186.29
 912ULS/914UL, #OTAS2



Fuel Pressure, 2 1/4"
 Gauge, #FPAS, \$99.95
 Probe, #N1EU035G, \$129.00



EGT, 2 1/4" \$199.00
No probe included
 Uses standard K type probe.
 For Rotax 912/912ULS engines. #EGTAS

AVIASPORT S.A.



CHT 2 1/4" \$99.95
No probe included
 Uses standard probe on Rotax 912UL engine.
 Gauge #CHTAS1
 Probe #965 530



CHT, 2 1/4" \$99.95
No probe included
 Uses standard probe on Rotax 912ULS/914 engines.
 Gauge #CHTAS2
 Probe #965 530

Volt, 2 1/4" \$119.00
 #VMAS



Tach, 2 1/4" \$124.95
 For 912/912S/914
 Part# R62M



Tach, 2 1/4" \$124.95
 For 447/503/582/618 CDI
 Part# R62D

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Datcon Instruments



Voltmeter
 2" #VMDR \$24.95
 2 1/4" #VMDS \$29.95



Water Pressure, mechanical
 Water, 30 2" WPDR \$44.95
 Water, 30 2 1/4 WPDS \$49.95
 Includes hose and fittings, 6' is standard please add if needed.



Water temp gauge, electric
 Water, 240 2" WTDR \$34.95
 Water, 240 2 1/4 WTDS \$39.95
 Dual marked gauge, C&F
 Water, 240 2" WTDRD \$34.95
 Water, 240 2 1/4 WTDS D \$39.95
 Probes:
 240, 1/8"npt WTSND \$ 9.95
 240, 1/4"npt WTSND2 \$ 9.95



Oil Pressure gauges, electric includes probe
 Oil, 80 2" OPDR80 \$42.95
 Oil, 80 2 1/4" OPDS80 \$47.95
 Oil, 100 2" OPDR100 \$42.95
 Oil, 100 2 1/4" OPDS100 \$47.95
 Oil, 125 2" OPDR125 \$42.95
 Oil, 125 2 1/4" OPDS125 \$47.95
Probes, 1/8-27:
 80 psi sender OPSND80 \$29.95
 100psi sender OPSND100 \$29.95
 125psi sender OPSND125 \$29.95
 Fuel/water line FLU-180WP \$99/ft

Reliable & Economical

Datcon gauges are durable, water and vibration resistant. Available in both 2" round and 2 1/4" square mounting styles, these gauges are standard equipment in many marine and industrial applications. Made in the U.S.A. they are also available in a "smart" version with an LED for \$15 more, which lights when the max/min temp/level has been reached. Affordable and well-made, all gauges come with light and pricing includes sender unless otherwise noted. One year warranty on gauges and probes, all are 12V. Wiring and mounting screws sold separately.



Fuel level, capacitance Probe sold separately
 2" #FLDR \$34.95
 2 1/4" #FLDS \$39.95
 Probes include mounting hardware and 12' of wire
 12"straight #FGP12S
 12"bendable #FGP12B
 24"straight #FGP24S
 24"bendable #FGP24B
 Can be cut down to 6", \$70



Oil Temp gauge, electric
 Oil, 240 2" OTDR240 \$34.95
 Oil, 240 2 1/4" OTDS240 \$39.95
 Oil, 320 2" OTDR320 \$34.95
 Oil, 320 2 1/4" OTDS320 \$39.95
 Pricing includes sender
 Temp senders, 1/8" NPT:
 240 sender, low WTSND \$ 9.95
 320 sender, hi OTSND \$ 9.95

Fuel pressure, electrical STEWART WARNER
Sender sold separately
 Fuel, 0-16, 2" FPSW \$69.95
 Sender, 1/8"npt FPSWSNG \$59.95

ENGINE GAUGES



EGT, shown
 EGT, 2" V310-953 \$134.95*
 EGT, 2 1/4" V310-953S \$139.95*
 Thermocouple, V323-890 29.95
 *Price includes sender and 12' ext

CHT, 0-600 F
 CHT 2" V310-901 \$69.95
 CHT, 2 1/4" V310-901S \$74.95
 Price does not include sender
 12mm probe, V323-705 \$17.95
 14mm probe, V323-701 \$17.95



120C
 WATER, 2" V310-080 \$34.95
 2 1/4" V310-080S \$39.95
 Price does not include sender
250F, 2" V310-041 \$34.95
 2 1/4" V310-041S \$39.95
300F/150C DUAL SCALE
 WATER, 2" V310-915 \$34.95
 2 1/4" V310-915S \$39.95
150C ONLY
 WATER, 2" V310-081 \$34.95
 2 1/4" V310-081S \$39.95
 Price does not include sender



OPTIONAL IN-LINE FITTING
 for 1" id hose.
 #GAWTFIL, no probe, for 1/8-27 \$29



300 DEGREE F,
 OIL, 2" V310-012 \$34.95
 OIL, 2 1/4" V310-012S \$39.95

FUEL LEVEL, CAPACITANCE TYPE
 2" V301-029 \$29.95
 2 1/4" V301-029S \$34.95
 Capacitance senders:
 12" straight FGP12S \$70.00
 12" bendable FGP12B \$70.00
 24" straight FGP24S \$70.00
 24" bendable FGP24B \$70.00

FUEL LEVEL, FLOAT TYPE
 2" V301-601 \$39.95
 2 1/4" V301-601S \$44.95
 Float type senders:
 Sender only V226-001 \$34.95
 Sender w/
 mounting kit V226-002 \$54.95
 Mount kit only V226-451 \$19.95



80 PSI
 2" V350-040 \$34.95
 2 1/4" V350-040S \$39.95
100 PSI
 2" V350-065 \$34.95
 2 1/4" V350-065S \$39.95

150 PSI
 2" V350-041 \$34.95
 2 1/4" V350-041S \$39.95
5 Bar
 2" V350-080 \$34.95
 2 1/4" V350-080S \$39.95
10 Bar
 2" V350-081 \$34.95
 2 1/4" V350-081S \$39.95
 Pricing does not include senders

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VOLTMETER
 12V, 2" V332-041 \$29.95
 12V, 2 1/4" V332-041S \$34.95
 24V, 2" V332-042 \$29.95
 24V, 2 1/4" V332-042S \$34.95
 RANGE MARKINGS ARE STANDARD



PRESSURE SENDERS

RANGE	TYPE	PART#	EACH
0-15/0-30	1/8-27	V360-043	34.95
0-80	1/8-27	V360-003	34.95
0-80	1/8-27	V360-410 2 prong	34.95
0-100	1/8-27	V360-086	34.95
0-150	1/8-27	V360-004	34.95
0-150	1/8-27	V360-025 2 prong	34.95
0-150	1/8-27	956 357*	258.66

ALL PRESSURE SENDERS HAVE TAPERED THREADS. DO NOT USE TAPE OR SEALANT AS THIS WILL INTERFERE WITH GROUNDING

TEMPERATURE SENDERS, use slide connector 864011, no included w/probe

RANGE	TYPE	PART#	EACH
0-250F	1/8-27, spade	V323-095	16.95
0-250F	5/8-18, screw	V323-422	29.95
0-300F	1/8-27, spade	V323-057	16.95
0-300F	5/8-18, screw	V323-061	34.95
0-300F	M10x1.5, 912	965 530*	186.29
0-400F	1/8-27, 5/8 long	V323-050	16.95
0-400F	1/8-27, 3/8 long	V323-086	19.95
0-400F	M10x1.5	V323-091	16.95

*Rotax original factory sender for 912/912S/914



AMMETER, NON-SHUNTED
 30/30, 2" V190-103 \$34.95
 30/30, 2 1/4" V190-103S \$39.95
 60/60, 2" V190-031 \$39.95
 60/60, 2 1/4" V190-031S \$44.95
 150/150, 2" V190-040 \$39.95
 150/150, 2 1/4" V190-040S \$44.95



0-30, Mechanical PSI
 Fuel, 2" V150-103 \$39.95
 Fuel, 2 1/4" V150-103S \$44.95
0-100, Mechanical PSI
 OIL, 2" V150-030 \$39.95
 OIL, 2 1/4" V150-030S \$44.95
0-150, Mechanical PSI
 OIL, 2" V150-046 \$34.95
 OIL, 2 1/4" V150-046S \$39.95
0-10 Bar, Mechanical
 OIL, 2" V150-082 \$34.95
 OIL, 2 1/4" V150-082S \$39.95

STANDARD VDO FEATURES: *2 YEAR LIMITED WARRANTY
 *BULB TYPE LIGHTING, *AVAILABLE IN 2" OR 2 1/4", *ALL GAUGES 12V NEG. GROUND UNLESS SPECIFIED, *VIBRATION AND WATER RESISTANT

PRESSURE TUBING KITS

Includes tubing, 1/8-27NPT and 1/4-18 npt adaptors.
 6' plastic tubing kit V150-851 9.95
 16' plastic tubing kit V150-855 13.95
 6' copper tubing kit V150-856 12.95

HOURLY METER

2" V331-953 \$34.95
REQUIRES 12V DC



Temperature Gauges

100-260F/40-120C

2" round, (shown above)

Water	2C9-1	\$57.90
Oil	2C9-2	\$57.90
Carb	2C9-3	\$57.90
Coolant	2C9-5	\$57.90

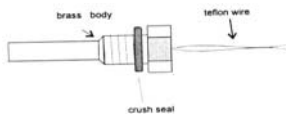
2 1/4" square

Water	2A9-1	\$70.60
Oil	2A9-2	\$70.60
Carb	2A9-3	\$70.60
Coolant	2A9-5	\$70.60

**PRICING DOES NOT INCLUDE PROBES
PLEASE ORDER SEPERATELY**

Temperature Probes, Brass

Teflon wire length can be modified without affecting probe performance.



Thread	Length	Type	Part#	Each
1/4-28	1/4"	Carb	399W	\$44.95
1/4-28	1/4"	Air	399OT	\$44.95
1/8npt	5/16"	Water/Oil	399S1	\$32.45
1/8npt	1"	Water/Oil	399S7	\$32.45
1/4npt	1"	Water/Oil	399S8-1	\$44.95
5/18-18	1"	Water/Oil	399S9	\$44.95
10-1.5mm, 1"		Water/Oil	399S10-1.5L	\$44.95
10-1.5mm, 5/8"		Water/Oil	399S10-1.5S	\$44.95

Gauge Extensions for CHT/EGT

Size	Cond	Part#	Each
6'	2	EXT62W	\$10.92
6'	4	EXT64W	\$13.44
10'	2	EXT102W	\$14.52
10'	4	EXT104W	\$17.28



PRESSURE GAUGE

	sender rqd	gauge
OIL 0-80/5.5KG 2"	2C8	387-80V2C 57.90
OIL 0-80/5.5 2 1/4	2A8	387-80V2C 70.60
OIL 0-100/7KG 2"	2C8-1	387-100V2C 57.90
OIL 0-100/7 2 1/4	2A8-1	387-100V2C 70.60
FUEL 0-8 psi 2"	2C8-109KV	38715KV 57.90
FUEL 0-8 psi 2 1/4"	2A8-109KV	38715KV 70.60
FUEL 0-15 psi 2"	2C8-8KV	38715KV 57.90
FUEL 0-15 psi 2 1/4	2A8-8KV	38715KV 70.60
FUEL 0-30 psi 2"	2C8-37KVLL	38730KV 57.90
FUEL 0-30 psi 2 1/4	2A8-37KVLL	38730KV 70.60

PRICING DOES NOT INCLUDE SENDER

387-80V2C	\$255.00
387-100V2C	\$255.00
387-15KV	\$255.00
387-30KV	\$255.00



Exhaust gas temperature, use K type prb

2" round (shown above)

700-1700F/350-950C	2C2	\$57.90
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3" round

600-1800F/400-950C	3C2	\$78.20
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2 1/4" square

600-1800F/400-950C	2A2	\$70.60
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3 1/8" square

600-1800F/400-950C	3A2	\$88.80
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For following additional ranges, add #- to above listed part numbers

RANGE **-#**

100-1900F/100-1000C	-1
400-900C	-2
400-1600F/200-850C	-7

**PRICING DOES NOT INCLUDE PROBES
PLEASE ORDER SEPERATELY**

EGT Probes, clamp type, 4' total length



Clamp size	Tip	Part#	Each
1 1/4-1 3/4"	1/2"	712-20DWK*	\$44.95
1 1/2-2"	1/2"	712-24DWK	\$44.95
1 1/2-2"	1"	712-24DWK-1	\$44.95
1 1/2"-2 1/2"	1/2"	712-32DWK	\$44.95
1 3/4"-2 3/4"	1"	712-36DWK	\$44.95
2"- 2 9/16"	1"	712-2DWK	\$44.95

*For use with Rotax 912 factory exhaust

EGT Probes, K, bayonet type, 4' total length



Thread	Tip	Part#	Each
8mmx1	2 1/2"x3/16"	712-4D6K*	\$49.95
1/8"npt	2 1/2"x3/16"	712-4D2K	\$49.95
1/8"npt	6"x3/16"	712-4D3K	\$49.95
1/4"npt	2 1/2"x1/4"	712-4D4K	\$49.95
1/4"npt	4 x 1/4"	712-4DK	\$49.95
3/8-24	2 1/2"x3/16"	712-4D1K	\$49.95

*For use with Rotax threaded boss #842-758 now standard on Rotax 2-stroke manifolds and 914 exhaust



VOLTMETER

6-16VDC2"	2C5	57.90
6-16 VDC2 1/4"	2A5	70.60
0-35 VDC 2"	2C5-2	57.90
0-35VDC 2 1/4"	2A5-2	70.60
18-28VDC 2"	2C5-4	57.90
18-28VDC 2 1/4	2A5-4	70.60



AMMETER, DC

+/-30 2"	2C6	57.90
+/-30 2 1/4"	2A6	70.60
+/-60 2"	2C6-15*	57.90
+/-60 2 1/4"	2A6-15*	70.60
+/-100 2"	2C6-3*	57.90
+/-100 2 1/4"	2A6-3*	70.60

*EXTERNAL SHUNT RQUD



Cylinder head temperature, use J type prb

2" round (shown above)

0-700/50-350C	2C1	\$57.90
25-375C	2C1-2	\$57.90
0-300F, FOR 912	2C9-13*	\$57.90

3" round

0-700/50-350C	3C1	\$78.20
25-375C	3C1-2	\$78.20

2 1/4" square

0-700/50-350C	2A1	\$70.60
25-375C	2A1-2	\$70.60
0-300, for 912*	2A9-13*	\$70.60

3 1/8" square

0-700F/50-250C	3A1	\$88.80
25-375C	3A1-2	\$88.80

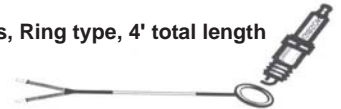
**PROBES NOT INCLUDED,
PLEASE ORDER**

SEPERATELY

*GAUGE NEEDS 399S10-1.5S PROBE

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CHT Probes, Ring type, 4' total length



Ring size	Part#	Each
10mm	712-9WK	\$21.95
12mm	712-8WK	\$21.95
14mm	712-4WK**	\$21.95
18mm	712-5WK	\$21.95

**Standard for Rotax 2 stroke engines

CHT Probes, J, bayonet style, 4' total length



Thread	Tip	Part#	Each
1/8"npt	2 1/2"x3/16"	712-7DJK	\$54.95
1/4"npt	4 x 1/4"	712-7DKK	\$54.95
3/8-24	2 1/2"x3/16"	712-7DK	\$54.95
1/2"npt	4 x 1/4"	712-7DHK	\$54.95



HOURLMETER, 5-50V, AC/DC

2"	2C10-2*	99.95
2 1/4"	2A10-2*	104.95
	POWRADPT 329LPA	28.90

*REQUIRES 329-LPA WITH CDI IGNITION ENGINES.

TOGGLES

Dual gauges out of your price range? No problem! These toggles allow you to monitor up to six separate temps with one gauge. 96" leads

PART#	TYPE	Each
Single gauges**		
254-2F	2 way	\$35.88
254-4F	4 way	\$43.92
254-6F	6 way	\$52.92
Dual gauges**		
254-2FD	2 way	\$43.92
254-4FD	4 way	\$70.92
254-6FD	6 way	\$83.88

**FOR USE W/712 TYPE SENDER

ENGINE GAUGES



DUAL AND TRI/QUAD GAUGES

Westberg offers dual, three and four gauge combos. Duals are available in 2, 2 1/4, 3 and 3 1/8" while tri and quad gauges are only available in 3 1/8" size. Many more available than shown and Westberg custom makes each gauge, so if you don't see what you need, pick what you want in your combo and call for a quotation. Prices shown are less senders and extensions.



DUAL GAUGES

AMPSXVOLTS 2 1/4"	2DA10	\$102.20
CHTXCHT 2"	2DC8	\$103.40
CHTXCHT 2 1/4"	2DA8	\$129.10
CHTXCHT 3 1/8"	3DA8	\$143.20
CHTXEGT 2"	2DC1	\$103.40
CHTXEGT 2 1/4"	2DA1	\$129.10
CHTXEGT 3 1/8"	3DA1	\$143.20
CHTXRPM 2"	2DC98A2/6	\$169.10
CHTXRPM 2 1/4"	2DA98A2/6	\$196.00
CHTXRPM 3 1/8"	3DA98A2/6	\$144.95
EGTXEGT 2"	2DC2	\$104.60
EGTXEGT 2 1/4"	2DA2	\$129.10
EGTXEGT 3 1/8"	3DA2	\$143.20
EGTXRPM 2"	2DC78A2/6	\$169.10
EGTXRPM 2 1/4"	2DA78A2/6	\$196.00
EGTXRPM 3 1/8"	3DA78A2/6	\$211.61
PSIXTEMP 0-80/100-260F	2DA3KV	\$193.80

QUAD GAUGE

COMBINATIONS	PART#	EACH
CHTX4,100-700F	3AQ1	\$308.70
EGTX4,600-1600F	3AQ2	\$308.70
EGT/CHT/EGT/CHT	3AQ3	\$308.70
CHT/RPM/EGT/HRS	3AQ11	\$424.90
OP/EGT/OT/CHT	3AQ4KV	\$355.30
OP/VOLT/OT/EGT	3AQ5KV	\$355.30
FUEL LEVELX4	3AQ9-3	\$339.20
VOLT/CARBTEMP/AIR/AMP	3AQ5-32	\$339.20

NO SENDERS WITH GAUGES, PLEASE ORDER SEPERATELY
GAUGES MADE TO ORDER.

GA

PRICES DO NOT INCLUDE SENDERS. PLEASE SPECIFY TEMPERATURE RANGE AND F OR C, AND ENGINE TYPE.

MOST POPULAR GAUGES SHOWN, HOWEVER, ALMOST ANY COMBO AVAILABLE, CALL FOR PRICING AND DELIVERY.

TACHOMETERS

Westberg offers the largest selection of light aircraft tachometers. These gauges are economical and easy to install. Available for nearly every engine made, these gauges are standard equipment on most light aircraft kits. 2, 2 1/4, 3, 3 1/8" sizes available, as well as dual and quad tachs. Please call for pricing and availability of gauges not shown. Please specify engine make, model and ignition when ordering.



TACHOMETER, 90 DEGREE

RANGE	PART#	EACH
0-3500 2"	2CT3A-2/6	\$111.00
0-3500 2 1/4"	2AT3A-2/6	\$119.10
0-5000 2"	2CT5A-2/6	\$111.00
0-5000 2 1/4"	2AT5A-2/6	\$119.10
0-8000 2"	2CT8A-2/6	\$111.00
0-8000 2 1/4"	2AT8A-2/6	\$119.10
0-10K 2"	2CT10A-2/6	\$111.00
0-10K 2 1/4"	2AT10A-2/6	\$119.10

ADD "A" AFTER PART# FOR ADJUSTABLE RPM, \$10 OPTION

TACHOMETER, 90 DEGREE

RANGE	PART#	EACH
0-3500 3"	3CT3A-2/6	\$131.00
0-3500 3 1/8"	3AT3A-2/6	\$137.50
0-5000 3"	3CT5A-2/6	\$131.00
0-5000 3 1/8"	3AT5A-2/6	\$137.50
0-8000 3"	3CT8A-2/6	\$131.00
0-8000 3 1/8"	3AT8A-2/6	\$137.50
0-10K 3"	3CT10A-2/6	\$131.00
0-10K 3 1/8"	3AT10A-2/6	\$137.50

ADD "Y" BEFORE PART# FOR HOURMETER, \$100 OPTION

TACH/HOURMETER, 90 DEGREE

RANGE	PART#	EACH
0-3500 2"	Y2CT3A-2/6	\$226.90
0-3500 2 1/4"	Y2AT3A-2/6	\$231.90
0-5000 2"	Y2CT5A-2/6	\$226.90
0-5000 2 1/4"	Y2AT5A-2/6	\$231.90
0-8000 2"	Y2CT8A-2/6	\$226.90
0-8000 2 1/4"	Y2AT8A-2/6	\$231.90
0-10K 2"	Y2CT10A-2/6	\$226.90
0-10K 2 1/4"	Y2AT10A-2/6	\$231.90

ADD "A" AFTER PART# FOR ADJUSTABLE RPM, \$10 OPTION

Tiny-Tach Smart Small Economical



TINY TACH, digital tach hourmeter. Easy digital readout and the reliability of quartz accuracy make this tach/hourmeter hard to beat for the money. Easily resettable, 8 year lithium battery. Works on any type ignition. Made in U.S.A., 15' lead standard. Easy installation, simply wrap wire included around existing spark plug lead.
#TT2A \$56.95

ONE TOUCH TACH



Not sure if your tachometer is reading properly? This is the best, most economical one we've found. Easy to use w/auto shut-off, this tool reads in 10 rpm increments, and reads 2, 3, or 4 blade props with just the touch of a button. Only way to be sure that your prop is actually turning what your tachometer is reading. Remember to multiply by your gear ratio to get proper reading. Uses 1 9V battery, not included.
#ONETT, \$44.95

ENGINE GAUGES



1 1/4" square



2 1/4" square

CYL HEAD TEMP, 2 1/4", \$139
Shown with optional opti-alert

PART# RANGE
12-460-300 100-300F*
12-460-150C 40-150C*
12-460-600 100-600F**
1 1/4" square, \$169
#N12-116V-300F020*
PRICES ARE LESS PROBE
*USES EXISTING PROBES ON
912/914 ENGINES
**Use J type probe 2BX



1 1/4" square



2 1/4" square

OIL TEMP, Electrical, 2 1/4", \$139

Shown with optional opti-alert and range marks
PART# RANGE
12-260-300 100-300F*
12-260-150C 40-150C*
1 1/4" square, \$169
#N12113V300F0A0*
PRICES ARE LESS PROBE
*USES EXISTING PROBES ON
912/914 ENGINES



1 1/4" square



2 1/4" square

VOLTMETER, 2 1/4" \$159
Shunt not included, \$39

Shown with optional opti-alert
PART# RANGE SHUNT
14-260-14 9-16 volts 1C1
14-260-28 20-32 volts 1C2
1 1/4" square, \$169
14-110-16 9-17
14-110-28 20-32



EGT, 2 1/4", \$145

Shown with optional opti-alert
PART# RANGE
12-560-1K7 700-1700F, K type
12-60-900C 400-900C, K type
1 1/4" square, \$169
N12-117K-1K7F-000 700-1700, K type
N12-117K-19CC-000 400-900C, K type



1 1/4" square



1 1/4" square



2 1/4" square

OIL PRESSURE

Shown with optional range marks

2 1/4" square, \$139
4-260-100U 0-100 V360-003
4-260-150U 0-150 V360-004

1 1/4" square, \$169
PART# RANGE Sender
N04113V080P000 0-80 V360-003
N04113U100P000 0-100 1EU35G (UMA)
N041135100P000 0-100 1EA100 (Ashcroft)
N04113V130P000 0-130 V360-086
N04113U150P000 0-150 1EU150G (UMA)

***PRICING OF GAUGES SHOWN ON THIS PAGE DOES NOT INCLUDE PROBES OR MOUNTING HARDWARE**

***ADD \$50 FOR INTERNAL LIGHTING, PLEASE SPECIFY RED OR WHITE**

***ADD \$40 FOR RANGE MARKING**

***ADD \$25 FOR OPTI-ALERT:**

OPTI ALERT signals the pilot when there is a problem by illuminating an LED on the face of the gauge. These two bring LED's can be set to turn on below and/or above a normal operating range. Available in amber or red. Set points must be specified when ordering. Available for 2 1/4" aircore gauges only.



Size 1 1/4"

Part#

Price

1 1/4 N20-11F0-0800-000 \$145
2 1/4" 20-210-08 \$145
Transducer (not included w/gauge)
FT-60 \$199

FUEL FLOW 0-8 GPH



2 1/4" square



1 1/4" square

FUEL PRESSURE, 2 1/4

Shown with optional range marks"

ELECTRICAL: (90 DEG SWP), \$139

Part# Range Probe, \$135
4-360-007U 0-7 psi N1EU07G
4-360-015U 0-15 psi N1EU35G
4-360-030U 0-30 psi N1EU35G
1 1/4" square, \$169
N04-112U-007P-000 0-7 psi N1EU07G
N04-112V-015P-000 0-15 psi V360-043
N04-112V-030P-000 0-30 psi V360-043



2 1/4" square

MANIFOLD PRESSURE, 2 1/4"

Mechanical:
Shown w/optional markings

Single Diaphragm, \$145
7-100-20 10-35 in. Hg.
7-100-10 10-50 in. Hg.
Dual Diaphragm \$220
7-200-35 10-35 in. Hg.
7-200-50 10-50 in. Hg.
Electrical:
7-260-35 10-35 in. Hg.
7-260-50 10-50 in. Hg.
Both electrical gauges use sender# N1EU50A, \$149



2 1/4" square



1 1/4" square

WATER TEMP, ELECTRIC, 2 1/4, \$145

Part# Range Sender
12-360-300 100-300F 1BX
12-360-150C 40-50C 1BX
WATER TEMP, 1 1/4", \$169
N12-112U-150C-000 40-150C 1BX
N12-112U-300F-000 100-300F 1BX
N12-112V-300F-000 100-300F *
*Uses existing probe in Rotax 9 series



2 1/4" square



1 1/4" square

WATER PRESSURE, ELECTRIC, 2 1/4, \$145

Part# Range Sender
4-460-015-U 0-15 psi N1EU35G
4-460-030U 0-30 psi N1EU35G
WATER PRESSURE, 1 1/4" square Electrical, \$169
N04-115V-015P-000 0-15 psi V360-043
N04-115V-030P-000 0-30 psi V360-043

ENGINE GAUGES



TACHOMETERS



3 1/8" ANALOG TACH/HOURMETER



2 1/4" ANALOG TACHOMETER
AVAILABLE W/ PIVOT AND
JEWEL OR CORE MOVEMENT



1 1/4" ANALOG TACHOMETER
AIRCORE MOVEMENT
270 DEGREE SWEEP

ALL GAUGES SHOWN ABOVE WITH OPTIONAL RANGE MARKING

ENGINE TYPE	SIGNAL SOURCE	ANALOG	AIRCORE ANALOG	TACH/HOUR
AERO	GENERAL OUTPUT	19-505-20A	19-515-20A	19-805-20A
CONTINENTAL	MECH. TACH PORT	19-501-10*	19-511-10*	19-801-10*
	SLICK MAG(P LEAD)	19-506-10G		19-806-10G
	GE GENERATOR	19-507-10		19-807-10
CUYUNA(2 STRK INTL)	BOSCH MAGNETO	19-505-20C		19-805-20C
FRANKLIN	W/MECH TACH PORT	19-501-10*	19-511-10*	19-801-20*
HIRTH	BOSCH MAGNETO	19-505-20C		19-805-20C
LYCOMING	W/MECH TACH PORT	19-501-10*	19-511-10*	19-801-10*
	SLICK MAG(P LEAD)	19-506-10G		19-806-10G
	MOSLER	SLICK MAGNETO		
PRATT&WHITNEY	W/MECH TACH PORT	19-501-10*	19-511-10*	19-801-10*
ROTAX:				
2 CYLINDER 2 STROKE	277,377,447,503,532			
	W/BOSCH POINT MAG	19-505-20C		19-805-20C
2 CYLINDER 2 STROKE	447,503,582,618			
	W/DUCATI IGNITION	19-505-20A	19-515-20A	19-805-20A
4 CYLINDER 4 STROKE	912/914	19-505-20B	19-519-211	19-819-201
SUBARU(NSI)	HPV-1 IGNITION	19-504-20D	19-514-20D	19-804-20D
VOLKSWAGEN	STOCK POINTS	19-503-204	19-513-204	19-803-204
	SLICK MAGNETO,P LEAD	19-506-10G		19-806-10G
ZENOAH	BOSCH MAGNETO			
ROTOR TACH	TOOTH COUNTER	19-502-30	19-512-30	19-802-30

STANDARD SET POINT FOR TACHS IS 1800. OTHERS AVAILABLE.

*Indicates tach using TSU sending unit. The TSU sending unit connects directly to the mechanical drive port on all Continental and Lycoming engines. The TSU replaces the troublesome mechanical cable and tachometer. The sending unit generates pulses, either clockwise or counter-clockwise, which are picked up by an electronic tach, for accurate RPM readings at all times. Requires a 10-28V DC power connection. Also requires a wiring harness. Please specify length needed, standard is 6 ft. Wiring harness (1D5) is sold separately. Tachs are available in any of UMA's models.

GA



HOBBS HOURMETERS, manufactured by Stewart/Warner/Hobbs are highly reliable and affordable. This space saving gauge is 2" wide and 1" high. Requires DC power to operate. Pressure switch available, threaded adaptor sold separately

Description	Part#	Each
Rectangular Hobbs hourmeter	85000	\$36.95
4 PSI pressure switch, norm opn	85000PS	\$36.95
Pressure switch adaptor	ADAPT1/8-10MM	\$ 9.95



Gauges with Range Markings for 912/912S/914UL



UMA Tach, Electrical
Range marked,
9 series Rotax
2 1/4" #19-519-211, \$155



Mitchell Oil Temp, 2 1/4"
uses sender on motor
#D1-211-5090, \$90



Mitchell Oil Psi, 2 1/4"
uses sender on motor
#D1-211-5058, \$90



Mitchell CHT, 2 1/4"
uses sender on motor
#D1-211-5109, \$90



UMA 1 1/4" gauges, great for tight spaces. Rangemarked for Rotax 9 series motors. Other markings available.

GA



UMA 2 1/4" Airbox
Differential PSI gauge
Gauge w/markings
1 1/4", #N04118U007P-010, \$239
2 1/4", #N04218U007P-010, \$239
Sender, #1EU07D, \$129



UMA Fuel flow gauges, transducer sold separately.
1 1/4", #20-110-60, \$149
2 1/4", #20-210-60, \$188
Transducer, #FT60, \$255



**Other range markings available.
For color pictures of range marked
gauges, please see our website:**

www.lockwood-aviation.com

ENGINE GAUGES



EIS Digital Gauges

Models 4000/6000/9000, \$795-1175, Four-Stroke Package Provides...

Specific models are available for Lycoming/Continental, Rotax 912/914, Jabiru engines, and the M-14P engines.

Functions :

- * 4 or 6 EGT's*
- * 4 or 6 CHT's*
- * Tachometer
- * Oil Temperature
- * Oil Pressure
- * 6 Auxiliary Inputs user configurable can provide:
 - *Manifold Pressure (normally aspirated or turbo)
 - *Fuel Pressure
 - *Fuel Level (using capacitive or float-type sending units)
 - *Coolant Pressure
 - *Ampmeter
 - *Ignition Advance, second voltmeter, rotor rpm, etc.
- * Outside Air Temperature
- * Voltmeter
- * Carburetor Temperature
- * Hour meter
- * Flight Timer with Interval Timer

Features:

- [Comprehensive Leaning Functions](#) – The best available
- EGT Tracking – Instantly reveals the source of roughness or other problems
- Alarms on all functions, most with upper and lower limits
- 2 User-defined Combination Screens
- 2 Graphical EGT/CHT Screens w/user-programmable data
- User - selectable labels for auxiliary inputs
- Label/Data Flip-Flop identifies all data on combination pages
- Landing Checklist/Gear Reminder - T-triggered by RPM or asi
- User-Selectable Units (Fahrenheit/Celsius & Gallons/Liters)
- Serial Output – Allows data recording using a laptop PC
- Serial Input – Provide for growth to interface with other system

Options that can be included in your EIS:

Fuel Flow System – Provides flow rate, fuel left, and time til empty. Includes a FloScan Fuel Flow Sending Unit. Accurate to 1%, \$375.

Altimeter & VSI – Excellent backup, or may be used as a primary instrument. 10' resolution. -1000 to +35,000 range, \$149.

Airspeed – Excellent backup or primary airspeed indicator. Range of 30-265 mph indicated, \$195.

Tefzel Cable upgrade, \$28.

Slave unit, \$350.

Special EGT/CHT Alarms detect problems – easily!

- EGT Span - Max difference between highest and lowest EGT
- EGT Max - Active only when above a specified RPM.
- EGT Min - Active only when above a specified RPM.
- EGT Cruise Mode Hi and Low Alarms - Alerts you to subtle changes in EGT after leaning
- CHT Shock Cooling - Max cooling rate

* The model 9000 includes 9 EGT inputs, and 3 CHT inputs.

Model 2002, \$499, Two-Stroke Package Provides...

- **Tachometer** — accurate to 10 rpm
- **Dual EGT** — for monitoring mixture (A MUST!)
- **Dual CHT** — for monitoring of proper cooling.
- **Coolant Temperature*** — for water-cooled engines
- **Outside Air Temperature Probe***
- **Options for Altimeter/VSI, Airspeed, and/or Fuel Flow***
- **Fuel Level Probe*** — Electronic capacitive type. No moving parts makes it easy to install.

* Probe or sensor for this function not included in package price.

Model 2004, \$579, Four-Stroke Package Provides..

- Tachometer — **10 RPM resolution**
- Dual EGT — **for monitoring mixture**
- Dual CHT — **for monitoring of proper cooling.**
- Oil Pressure* — **1 psi resolution to 99 psi**
- Oil Temperature* — **1 deg F resolution**
- Coolant Temperature — **(Adv -W model)**
- Outside Air Temperature* — **(Adv -A model)**
- Voltmeter — **0.1 Volt resolution**
- Hour meter — **runs only when engine operating**
- Flight Timer — **includes alarm**
- Dual Auxiliary Inputs* — **variety of uses**
- Serial Channel Output — **Via Warning Light Output**

* Probe or sensor for this function not included in package price. The EIS uses the sensors for oil pressure and oil temperature that are factory installed on the Jabiru and Rotax 912/914 engines. Must be purchased for other engines.

Model 2002/2004 Gauge Options:

*Altimeter/VSI option, \$149

*Airspeed, \$195

*Pre-wired cables, \$30

*Outside air temp, \$24

*Bayonet style CHT probe, \$38

Auxiliary input options:

*Fuel flow with flow scan sensor, \$375

*Low pressure sensor, \$35

*Fuel level, \$85

*Manifold psi sensor, \$60

**SUPER SIZING IS
STANDARD!**

GA

D10



Engine Monitoring System

The EMS-D10 is an ergonomically engineered Engine Monitoring system (EMS) that blends traditional analog gauges with newer digital technologies. The EMS-D10 replaces up to 16 different types of gauges and fits nicely into a standard 3-1/8" panel cutout. The sunlight readable, color display and softkey menu system result in a user-friendly instrument that enhances overall safety and peace of mind.

What makes the EMS-D10 so powerful is its ability to continuously monitor up to 27 available sensor inputs that cover the engine, fuel and other miscellaneous systems and [annunciate any abnormality](#) immediately upon detection. This constant scan significantly reduces the pilots workload while providing a more thorough and consistent review.

A [multi-page display](#) environment provides pilots with an excellent systems overview coupled with the added capability of presenting additional detail upon demand to optimize overall management of the various systems. Each of the color graphic screen presentations promotes easy visual scanning for interpretation of the current measurements relative to their normal/abnormal operational limits.

Engines & Probes

Dynon offers a [variety of probes](#) to accompany the EMS-D10 instrument with very attractive package pricing. The probes initially offered by Dynon are optimized to support a variety of engines including [Lycoming, Continental, Rotax, and Jabiru](#). Probes may also be purchased individually to monitor other types not specifically packaged by Dynon.

Airplanes with existing engine sensors may already be compatible with the Dynon EMS-D10 system. The EMS-D10 was designed with the intention of retrofitting some of the more popular non graphical systems already in existence like Grand Rapids EIS systems. While not 100% backward compatible, replacement costs are minimized to the extent possible. Please review the specifications and [sensors charts](#) on this website for additional detail.

Items supplied with each EMS-D10 include:

- EMS-D10 Instrument
- Installation Guide
- Pilot User Manual

STARTING AT
\$1695



The EMS-D120 is a large screen Engine Monitoring System (EMS) that blends traditional analog gauges with newer digital technologies. The EMS-D120 replaces up to 16 different types of gauges which are displayed on a stunning 7" diagonal color screen. The sunlight readable, color display and softkey menu system result in a user-friendly instrument that enhances overall safety and peace of mind.

What makes the EMS-D120 so powerful is its ability to continuously monitor up to 27 available sensor inputs that cover the engine, fuel and other miscellaneous systems and annunciate any abnormality immediately upon detection. This constant scan significantly reduces the pilots workload while providing a more thorough and consistent review.

[split-screen](#) display environment provides pilots with an excellent overview of the system coupled with additional pages of auxiliary information all available upon demand. Each of the [color graphic pages](#) are designed to promote easy visual scanning for interpretation of the current measurements relative to their normal/abnormal operational limits.

Unlike many other similar systems, Dynon's EMS-D120 is [easy to setup](#) while simultaneously supporting a high degree of configurability to [accommodate a variety of different engines](#) and pilot preferences. The default boot-up or start-up screen example depicted above contains two separate pages on a [split-screen format](#). During the [initial setup](#), installers determine which gauges are indicated, their operational ranges, and whether an alarm is manifested along with its behavior. [Info Items](#) may be added to present the specific needs of the particular engine, aircraft or pilots preferences. This degree of engine specific and pilot preferential customization when combined with a [multi-page](#) type of display and pilot configured [checklists](#) all add up to provide a unique presentation tailored to fit almost any need.

Items supplied with each EMS-D120 include:

- EMS-D120 Instrument
- [Mounting Tray](#)
- Installation Guide
- Pilot User Manual

STARTING AT
\$1995

GA

FLIGHT INSTRUMENTS EFIS-D10A



The EFIS-D10A Electronic Flight Information System provides a solid-state solution for the ten most important instruments you need. The flight data are all ergonomically arranged onto a single, bright sunlight readable, color liquid crystal display to optimize functionality and panel space, starting at \$2195 See page 188 for options and further pricing.

INSTRUMENTS INCLUDED

- Attitude Indicator
- Airspeed Indicator
- Altimeter
- Vertical Speed Indicator
- Gyro-Stabilized Compass Heading
- Turn Coordinator/Ball
- Turn Rate
- Clock/Timer
- G-Meter
- Voltmeter
- Angle-of-Attack (with optional Dynon AOA pitot)
- Serial altitude encoder output to your transponder

ALL SENSORS INSIDE

The EFIS-D10A instrument includes 15 solid-state sensors all inside the instrument housing eliminating any complicated installation problems. These sensors include accelerometers, pressure transducers, temperature sensors, gyros, and magnetometers. If desired, an optional external compass/magnetometer and outside air temperature probe may be added to your system.

SAVE SPACE, WEIGHT, TIME & MONEY!

Your instrument panel is one of the larger investments you're likely to make. Considerable money and space savings can be realized when selecting the EFIS-D10A system. This compact design optimally replaces 10 flight instruments plus your altitude encoder all in one easy to install packaged system. Not only do you free up valuable panel space, but significantly save on installation time and complexity.

EASY TO INSTALL

This highly integrated instrument design makes installation far simpler than all of the separate traditional gauges it replaces. With the EFIS-D10A you simply:

- Mount the instrument to your panel
- Wire two leads to your main avionics power bus
- Wire three leads for a PC interface
- Connect the air speed & static pressure lines from the pitot system
- Perform a magnetic compass calibration

Even if you choose all the Optional Features, you need not be an avionics technician to install this system.

ENHANCED RELIABILITY

The solid-state design uses no moving parts, inherently making it more reliable than traditional mechanical gyros and vacuum systems. It's a favorite among aerobatic pilots whose maneuvers cannot harm the instrument.

Note: This EFIS-D10A is intended for the Experimental aircraft category and is not approved for installation in certified aircraft.

STARTING AT
\$2195

EFIS-D100



Dynon's EFIS-D100 is the most affordable large screen Electronic Flight Information System on the market today. Based on the best-selling EFIS-D10A, the 7" wide-screen display features large, easy to read text and graphics and is capable of displaying multiple pages side by side in a split-screen format. The instrument integrates multiple [flight instruments](#), including airspeed, altitude, gyro-stabilized magnetic compass, turn rate, slip/skid ball, bank angle, and vertical speed. Other useful functions include a clock/timer, g-meter, voltmeter and density altitude/true airspeed calculator.

The EFIS-D100 features a [7" diagonal, color LCD](#) which boasts the highest resolution in its class. The stunning display enables [split-screen viewing](#) to augment the primary EFIS data with other pages of information called up by the pilot. Six buttons arranged along the bottom of the screen serve as the interface to the [softkey-driven menu system](#) for easy access to in-flight functions and setting pilot preferences.

Items supplied with each EFIS-D100 include:

- EFIS-D100 Instrument
- [Mounting Tray](#)
- [Remote Compass](#)
- USB-Serial Converter for connection to USB equipped PCs
- Installation Guide
- Pilot User Manual

STARTING AT
\$2395

GA

Dynon FlightDEK-D180

The FlightDEK-D180 represents a brand new class of avionics that combines all EFIS and Engine Monitoring functions into a single, very powerful instrument. This affordable glass cockpit design integrates all the features and functionality of Dynon's EFIS-D100 and EMS-D120 systems. The overall result is a hi-tech, glass-cockpit instrument that is the ultimate panel space saver. Other key benefits of this design are the weight savings, simplified installation and lower overall cost.

Seamless Integration

Pilots may elect to display both functions simultaneously in split-screen format or switch over to a full screen EFIS or EMS via simple hotkey commands. Six buttons arranged along the bottom of the screen provide the pilot-interface via a softkey driven menu system for easy access to in-flight functions and setting pilot preferences.

Any alarms occurring in the system are immediately presented as a bright red alarm bar across the bottom of the screen independent of the page currently displayed. The alarm bar is automatically accompanied by menu selections to silence or acknowledge the alarm(s).

High Resolution Display

The FlightDEK-D180 features a 7" diagonal, color LCD boasting the highest resolution in its class. The stunning display features large, easy to read text and graphics all in one convenient location. A powerful processor driving the display graphics ensures real time fluid motion at all times.

GA

Wiring Harnesses

The FlightDEK-D180 uses three separate wiring harnesses for connections to power and all of its I/O. All harnesses are optionally available. See the FlightDEK-D180 outline drawing for an overview of the connections.

The two engine harnesses are available either separately or in conjunction with one of the probe packages Dynon offers. The third primary instrument (EFIS) harness is available as a separate option.

Safety Features

A key safety feature available from Dynon is its optional AOA/Pitot design that combines Angle-of Attack (AOA) and Airspeed into a single pitot design. The AOA capability assists pilots on approaches and generates an alert signal for audible annunciation whenever nearing stall conditions. To guard against a power failure scenario, the FlightDEK-D180 may be optionally equipped with a Li-Ion Backup Battery. When power loss is detected, the instrument will automatically notify the pilot and immediately begin running on battery power for a minimum of 1.5 hours to enable a safe landing.

Connectivity

The EFIS-D180 is equipped with a PC serial interface which provides the capability of uploading 25 user-defined lists for use as checklists, aviation data or other information that pilots wish to keep handy. The PC interface additionally facilitates downloading lifetime free program updates made available from Dynon's website.

One of Dynon's greatest value added features is the interlink capability that comes via the Dynon Smart Avionics Bus (DSAB). When linked to DSAB, data pages may be shared across the bus for display on any other Dynon instrument. DSAB not only not only allows you to share the fun with your co-pilot but delivers any Dynon generated data immediately in front of you - the pilot - whenever you call upon it.

Items supplied with each FlightDEK-D180 include:

- FlightDEK-D180 Instrument
- Mounting Tray
- Remote Compass
- USB-Serial Converter for connection to USB equipped PCs
- Installation Guide
- Pilot User Manual

See page 176 for options and pricing

STARTING AT
\$3200





SkyView Integrated Glass Cockpit Data Sheet

SkyView, The Next Generation of Glass Panel Avionics for Experimental and Light Sport Aircraft

GA



Experimental and LSA pilots know that they have the most technologically advanced GA aircraft flying. SkyView continues that tradition with the next generation of glass panels, including features that exceed those of systems costing much more. SkyView offers fully redundant networks and systems, incredibly bright screens, design flexibility, worldwide terrain, and future upgradability unsurpassed by any other glass panel system.

Mechanical Specifications: 3-D mechanical drawings and weights are on our Website at www.DynonSkyView.com.

System Components: The system architecture is shown on the back.

Trade-ins: We appreciate our customer's return business, and are offering credit to customers upgrading their Dynon systems. Trade in your Dynon EFIS and/or EMS and we will credit 1/2 the list price towards the purchase of a new SkyView system. There are details and limitations which are listed on our Website.

Pricing:
A single 7" PFD System is only **\$3,900!**

A single 7" PFD and Engine Monitor is only **\$4,500.**

An "Ultimate System" with dual 10" Displays, redundant ADAHRS, Engine Monitor, and Backup Battery is only **\$9,980.**

SkyView Module Pricing:

SV-D700 7" SkyView Display (includes main wiring harness)	\$2,700
SV-D1000 10" SkyView Display (includes main wiring harness)	\$3,600
SV-ADAHRS-200 SkyView Air Data Attitude Heading Reference System - First	\$1,200
SV-ADAHRS-201 SkyView Air Data Attitude Heading Reference System - Additional	\$800
SV-EMS-220 SkyView Engine Monitoring Module (engine sensor kits additional)	\$600
SV-MAP-270 SkyView Navigation Mapping Software (*not yet available)	\$500*
SV-GPS-250 SkyView GPS 5Hz Receiver Module	\$200
SV-BAT-320 SkyView Backup Battery	\$180
SV-NET-XX SkyView Network Cable with Tefzel® Wiring (various lengths)	varies with length
SkyView Autopilot Software included with every system (*not yet available)	\$0*

Dynon Avionics, Inc.

www.DynonAvionics.com

Voice: (425) 402-0433

Fax: (425) 984-1751

Dynon EFIS/EMS Pricing

D10/D10A/D100/D120

	Part#	Price
EFIS D10A Instrument Only	EFIS-D10A	\$2,195
D10A Options:		
Internal Li-Ion Backup Battery	EFIS-BP	\$130
Remote Compass	EFIS0RC	\$100
OAT Probe	EFIS-OAT	\$65
D10 Flush Mount Bracket	EFIS-FMB	\$20
AOA/Pitot Probe (unheated)	EFIS-PPU	\$200
Wiring Harness	EFIS-IH100	\$90
Encoder converter module (serial to parallel converter for gray code transponders)	EFIS-ECM	\$80
USB-Serial converter	EFIS-USB	\$20
EFIS D100 System , includes remote compass, mounting tray & USB-serial converter	EFIS-D100	\$2395
EFIS D100/D180 Options:		
Internal Li-Ion Backup Battery	EFIS-BP	\$130
OAT Probe	EFIS-OAT	\$65
AOA/Pitot Probe (unheated)	EFIS-PPU	\$200
Wiring Harness	EFIS-IH100	\$90
Encoder converter module (serial to parallel converter for gray code transponders)	EFIS-ECM	\$80
EMS D10 System (no sensors or wiring harness)	EFIS-D10	\$1695
EMS D120 System (no sensors or wiring harnesses included, includes mounting tray)	EFIS-D120	\$1995
Optional engine sensor packages for D10/120/180 (includes engine sensors and harnesses, save approx. 10% over ind. prices)		
4 cyl Lycoming/Cont package (carbureted)	EMSKIT-L4C	\$600
4 cyl Lycoming/Cont package (fuel inj)	EMSKIT-L4F	\$600
6 cyl Lycoming/Cont package (carbureted)	EMSKIT-L6C	\$750
6 cyl Lycoming/Cont package (fuel inj)	EMSKIT-L6F	\$750
4 cyl Rotax 912/914 package	EMSKIT-RTX	\$295
4 cyl Jabiru 2200 package	EMSKIT-J22	\$500
4 cyl Jabiru 3300 package	EMSKIT-J33	\$630
EMS Options:		
Fuel Flow Sensor	EFIS	\$200
USB-Serial Converter	EFIS-USB	\$20
D10 Flush Mount Bracket	EFIS-FMB	\$20
EGT Thermocouple ext wire	EFIS-EWE	\$1/ft
CHT Thermocouple ext wire	EFIS-EWC	\$1/ft
FlightDEK 180 System (includes remote compass, mounting tray, USB-serial converter, NO wiring harness)	EFIS-D180	\$3200
HS34 HIS EXPANSION MODULE		\$650
Extends the HIS function already built into and displayed on the EFIS. Expands the HSI functionality as well as enables several new features for any Dynon EFIS, EMS or FlightDEK instrument to which it is networked. Available in vertical or horizontal		
	EFIS-HS34	\$650

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AIRSPEEDS



AIRSPEED, UMA, 2 1/4", \$219.00*

RANGE	PART#
20-100MPH	16-210-100
20-120MPH	16-210-120
30-140MPH	16-210-140
40-160MPH	16-210-160
40-180MPH	16-210-180
40-200MPH	16-210-200
40-240MPH	16-210-240
40-260MPH	16-210-260
40-300MPH	16-210-300



AIRSPEED, UMA, 3 1/8", \$195.00*

RANGE	PART#
10-80 MPS	16-310-080
20-100MPH	16-310-100
20-120MPH	16-310-120
20-140MPH	16-310-140
20-160MPH	16-310-160
20-180MPH	16-310-180
20-200MPH	16-310-200
40-240MPH	16-310-240
40-260MPH	16-310-260
40-280MPH	16-310-280
40-300MPH	16-310-300

FOR KNOTS USE 16-311-###
FOR KM USE 16-312-XXX
*INCLUDES PITOT KIT



AIRSPEED, UMA, 3 1/8", \$226.00*

Shown with optional range marking

DUAL MARKINGS, MPH/KNOTS		PART#
OUTSIDE	INSIDE	
20-160MPH	20-135KNOTS	16-310-160D
20-200MPH	40-170KNOTS	16-310-200D
40-240MPH	40-205KNOTS	16-310-240D
40-300MPH	40-250KNOTS	16-310-300D
40-350MPH	40-300KNOTS	16-310-350D
40-205KNOTS	40-240MPH	16-311-200D
40-300KNOTS	40-340MPH	16-311-300D

*INCLUDES PITOT KIT

PITOT KIT INCLUDES:

- *18" 1/4" ALUMINUM TUBE
- *6' 1/4" VINYL HOSE
- *2 1/4" HOSE CLAMPS
- *1 1/4X1/8NPT STRAIGHT FTG

OPTIONS ON AIRSPEEDS:

- Range marking, add \$40
- Internal lighting, add \$50

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AIRSPEED, 2 1/4", 139.00*

RANGE	PART#
0-80 MPH	AS802C
0-100 MPH	AS1002C
0-120 MPH	AS1202C
0-140 MPH	AS1402C

*INCLUDES PITOT KIT

AIRSPEEDS IMPORTED



AIRSPEED, 3 1/8", 139.00*

RANGE	PART#
0-80 MPH	AS803C
0-100 MPH	AS1003C
0-120 MPH	AS1203C
0-140 MPH	AS1403C
0-200 MPH	AS2003C
0-150 knots	AS1503K

*INCLUDES PITOT KIT

AIRSPEEDS

HALL BROTHERS



HALL ASI, tube type, is easily attached to a tube. Clamp adjusts for 7/8" to 1 1/8" diameter tube. Mini ASI's are smaller tubes made for slower craft. Made in the USA

AIRSPEED, TUBE TYPE			
RANGE	PART#	EACH	
0-30 mini MPH	HAI-30	21.50	
0-55 MPH	HAI-155	21.00	
0-70 mini MPH	HAI-70	21.50	
0-80 MPH	HAI-180	21.00	
0-130 KM/HR	HAI-130	21.00	
3" CLAMP	HAC-030	6.50	
12" CLAMP	HAC-120	7.00	

GAUGE PRICING DOES NOT INCLUDE CLAMP, PLEASE ORDER SEPARATELY



TURN COORDINATOR 3 1/8", ELECTRIC IMPORT

#TC001, \$499.00
DOES NOT INCLUDE CONNECTOR,
#TC001C \$16.95 EACH

**PLEASE NOTE
ALL PRICES
ARE SUBJECT TO CHANGE
WITHOUT NOTICE**

**PLEASE CALL
OR E-MAIL
FOR ASSISTANCE
IF YOU DON'T
SEE WHAT YOU NEED**



COMPASS, MAGNETIC, Panel or cowl mount. Imported.

PART#	REGION	EACH
C0011	NORTHERN HEMISPHERE	\$105.00
C0011L	NORTHERN HEMISPHERE, LIT	\$125.00
C0011S	SOUTHERN HEMISPHERE	\$105.00
C0011LS	SOUTHERN HEMISPHERE, LIT	\$125.00
C0012	NORTHERN HEMISPHERE	\$105.00
C0012S	SOUTHERN HEMISPHERE	\$105.00
C0012L	NORTHERN HEMISPHERE, LIT	\$125.00
C0012LS	SOUTHERN HEMISPHERE, LIT	\$125.00



VERTICAL CARD COMPASS, FITS STANDARD 2 1/4" MOUNT, COMES WITH ON-DASH MOUNT FRAME. MADE IN USA, LIGHTED. REQUIRES EXTERNAL POWER ONLY FOR LIGHT, PLEASE SPECIFY 12 OR 28 VOLT SYSTEM.

12 VOLT #PAI700-14, \$279.95
28 VOLT #PAI700-28, \$279.95

ALTIMETERS/VSIS



ALTIMETER, 2 1/4", 1 POINT

RANGE	BARO	PART#
0-10,000	INHG	5-410-10,\$286
0-10,000	MILIBAR	5-411-10,\$305
0-20,000	INHG	5-410-20,\$386
0-20,000	MILIBAR	5-411-20,\$305



ALTIMETER, 3 1/8", 1 POINT \$169.00

RANGE	BARO	PART#
0-3,000M	MILIBARS	5-300-50
0-5,500'	INHG	5-300-30
0-5,500'	MILIBARS	5-300-40
0-10,000'	INHG	5-300-20
0-10,000'	MILIBARS	5-300-41
0-20,000'	INHG	5-300-10
0-20,000'	MILIBARS	5-300-42



VERTICAL SPEED

FPM	SIZE/PART#	EACH
+/-2000	2 1/4,8-210-20	\$279.00
+/-2000	3 1/8,8-310-20	\$259.00
+/-4000	2 1/4,8-210-40	\$299.00
+/-4000	3 1/8,8-310-40	\$259.00
+/-6000	2 1/4,8-210-60	\$299.00
+/-6000	3 1/8,8-310-60	\$259.00

ALTIMETERS/VSIS IMPORTED



ALTIMETER, 2 1/4", 1 POINT WITH BARO WINDOW \$154.95

RANGE	PART#
0-3,000M	AL3M2C
0-6,000M	AL6M2C
0-5,500'	AL6K2C
0-10,000'	AL10K2C



ALTIMETER, 3 1/8", 1 POINT WITH BARO, \$129.95

RANGE	PART#
0-5,500'	AL6K3C
0-10,000'	AL10K3C
0-20,000'	AL20K3C



NEW! 10K 2 POINT 3 1/8" ALTIMETER!

Similar to United 10K altimeter, this imported altimeter is affordable and reliable. No baro window. #AL10K3C2P, \$259.95



ALTIMETER, 3 1/8" 3 POINT WITH BARO \$329.00

RANGE	BARO	PART#
0-20,000'	IN HG	AL20KB3CI
0-20,000'	MILIBAR	AL20KB3CM



VERTICAL SPEED

FPM	SIZE	PART#	EACH
+/-2000	2 1/4	VS2K2C	219.00
+/-2000	3 1/8	VS2K3C	149.00
+/-3000	3 1/8	VS3K3C	149.00
+/-4000	3 1/8	VS4K3C	149.00
+/-6000	3 1/8	VS6K3C	149.00

ALTIMETER, TASKEM



TASK5000

ALTIMETER, DIGITAL, BY TASKEM. Accurate to 10' increments, fully adjustable. Internal course setting allows for varying base settings. External power jack uses 9-30V input. Comes with replaceable internal battery. Standard 3 1/8" aircraft type installation. LCD display. Made in the USA

TYPE	PART#	EACH
Feet/meters	TASK5000	\$265.95
Feet/meters	TASK2000	\$395.00
OAT,density altitude option for 2000, #TASKOAT		\$99.00
Mode C output option for model 2000, #TASKMODEC		\$99.00



TASK2000



SLIP INDICATOR

SIZE	PART#	EACH
2 1/4"	SS225**	\$34.95
3 1/8"	SI022*	\$36.95

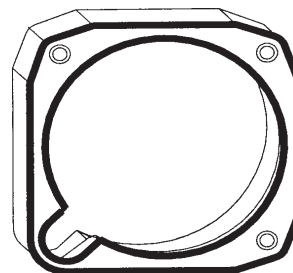
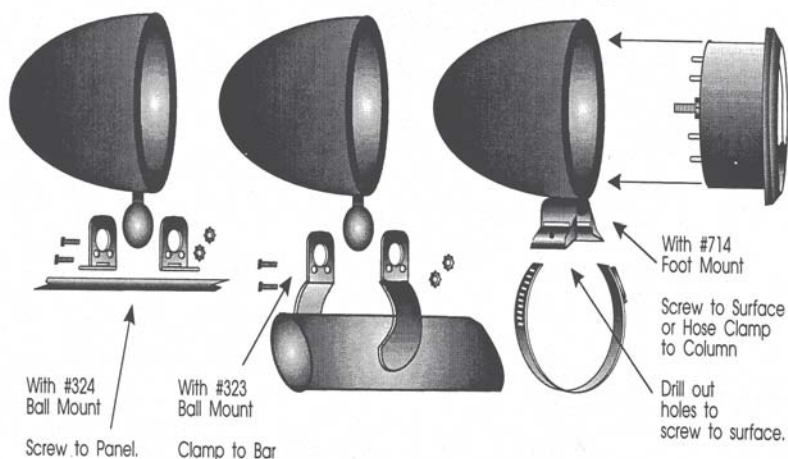
*Under gauge type
**Shown in picture



G-METER, 2 1/4", -4/+10 RESET BUTTON RETURNS GAUGE TO 0. IMPORTED \$375.00 PART# GMC

GAUGE ACCESSORIES

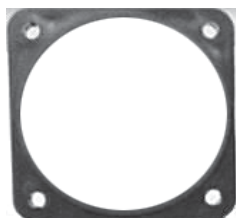
(Mounting Cups For 2 and 3 inch instruments)



2" & 3" GAUGE BULLET CASES, THREE TYPES AVAILABLE. MADE OF DURABLE BLACK PLASTIC BY WESTBERG MFG. MADE IN USA. FOR ROUND GAUGES ONLY.

PART#	GAUGE	TYPE	
692B-324	2"	SCREW TO PANEL	17.80
693B-324	3"	SCREW TO PANEL	19.95
692B-323	2"	CLAMP TO BAR	17.80
693B-323	3"	CLAMP TO BAR	19.95
692B-714	2"	FOOT MOUNT	17.80
693B-714	3"	FOOT MOUNT	19.95

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2 1/4" BEZEL MOD KIT FOR VDO GAUGES. CHANGES STANDARD 2" VDO GAUGES FROM ROUND TO 2 1/4" SQUARE MOUNT. KIT COMES WITH FRONT AND BACK BEZEL PLATES, 4 INSTRUMENT SCREWS AND NUTS. DURABLE BLACK NYLON, MADE IN THE USA. #BEZELK \$6.95



RANGE MARKING DECAL SET FOR 2" AND 3" GAUGES. KIT INCLUDES YELLOW AND GREEN CIRCLES AND RED LINE FOR BOTH SIZES. #STRMD2/3 \$3.95



PITOT COVER, KEEPS BUGS OUT OF YOUR PITOT TUBE WHEN ON THE GROUND AND OPENS WHILE AIRCRAFT IS IN MOTION. FITS 1/4" OD TUBING, #PC-1, OR 3/8" TUBING, #PC-2, \$7.49 EA.



WESTBERG light bulbs for lighting Westberg instruments. Kit includes red, green and clear, \$5.80. #186-12A2C

COMPASS DEVIATION CARDS, #STCC \$.75

FOR	N	30	60	E	120	150
STEER						
FOR	S	210	240	W	300	330
STEER						

LIGHTING FRAMES, BY UMA, INC. THESE FRAMES, AVAILABLE FOR BOTH 2 1/4" AND 3 1/8" GAUGES ILLUMINATE BY USING AN ELECTROLUMINESCENT LIGHT STRIP. THIS STRIP DRAWS VERY LITTLE CURRENT AND CREATES NO HEAT. AVAILABLE IN RED, WHITE AND GREEN, FAA/PMA'D. MADE IN THE USA. **POWER INVERTOR REQUIRED, NOT INCLUDED.**

SIZE	TYPE	PART#	COLOR	EACH
2 1/4	KNOTCHED	2-20-W	WHITE	52.00
2 1/4	KNOTCHED	2-20-R	RED	52.00
2 1/4	KNOTCHED	2-20-G	GREEN	52.00
2 1/4	NO KNOTCH	2-21-W	WHITE	52.00
2 1/4	NO KNOTCH	2-21-R	RED	52.00
2 1/4	NO KNOTCH	2-21-G	GREEN	52.00
3 1/8	KNOTCHED	2-30-W	WHITE	52.00
3 1/8	KNOTCHED	2-30-R	RED	52.00
3 1/8	KNOTCHED	2-30-G	GREEN	52.00
3 1/8	NO KNOTCH	2-31-W	WHITE	52.00
3 1/8	NO KNOTCH	2-31-R	RED	52.00
3 1/8	NO KNOTCH	2-31-G	GREEN	52.00
3 1/8	Cntr knotch	2-33-W	WHITE	52.00
3 1/8	Cntr knotch	2-33-R	RED	52.00
3 1/8	Cntr knotch	2-33-G	GREEN	52.00
3 1/8	Double knotch	2-34-W*	WHITE	60.00
3 1/8	Double knotch	2-34-R*	RED	60.00
3 1/8	Double knotch	2-34-G*	GREEN	60.00
3 1/8	VSI type	2-35-W	WHITE	54.00
3 1/8	VSI type	2-35-R	RED	54.00
3 1/8	VSI type	2-35-G	GREEN	54.00

Light strips

.5"W x 25"L	2-425-050W	White	54.00
.5"W x 25"L	2-425-050G	Green	54.00
.75"W x 23"L	2-423-075W	White	54.00
.75"W x 23"L	2-423-075G	Green	54.00
1.2"W x 11.5"L	2-411-120W	White	41.00
1.2"W x 11.5"L	2-411-120G	Green	41.00
1.5"W x 18"L	2-418-150W	White	69.00
1.5"W x 18"L	2-418-150G	Green	69.00

AC POWER INVERTOR, \$64.00

Lights up to 12 instruments with light rings (FAA-PMA)			
5V	10-700-05		
12/14V	10-700-14		
24/28V	10-700-28		
Dimmer switch, 1K ohm	1G01	\$29.00	
Bezel connector kit, 2 pc set w/12 wires	1G02	\$12.95	