US OPRA Options Open Interest Guide

version 1.0.0 (Apr 2026)

CONTACT US

We are here to help you do great things with our market data. For questions, feedback, and other concerns, you may reach our team of experts using the following contact information:

algoseek customer support

support@algoseek.com

(+1) 646 583 1832

algoseek sales

sales@algoseek.com

(+1) 646 583 1832

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REVISION SUMMARY

Effective Date	Version	Revision Type	Description
Apr 6, 2026	1.0.0	Release	An initial version of the dataset

INTRODUCTION

algoseek's Open Interest dataset for US Options on Equity, ETF, ETN, and ADRs is based on the open interest events from the Options Pricing Authority (OPRA) feed, which includes the consolidated last sale and quotation information from the 16 option exchanges that the Securities and Exchange Commission has approved.

OPRA DATA FEED

OPRA is a securities information processor that disseminates, on a current and continuous basis, information about transactions that occurred on the options markets. Each trade that is executed on an options exchange, as well as each price change quoted on an options exchange, is reported to OPRA. Also, OPRA calculates and identifies the National Best Bid and Best Offer (NBBO – highest bid and lowest offer). OPRA consolidates this information and disseminates it via computer-to-computer linkages to the financial community in the U.S. and abroad.

DATA ORGANIZATION AND FILE FORMAT

algoseek provides Options Open Interest data in plain-text CSV files. The first row of the CSV file is a fixed header, and then rows of data corresponding to individual OI records. The dataset is organized by trading day. It means, for example, that all open interest events for Mar 3, 2020, are stored in a separate CSV file under a trading day aggregation. The CSV files are gzip-compressed with a compression ratio of about 8:1: `yyyymmdd.csv.gz`.

Table 1 demonstrates the full list of data fields in the US OPRA Options Open Interest file with sample content, in which rows and columns are inverted for the convenience of the document display.

Table 1: US OPRA Options Open Interest Sample Data

TradeDate	20120130	20120130	20120130
Timestamp	063121557	063155123	063135420
Ticker	A	A	A
CallPut	P	C	C
StrikePrice	17	18	19
ExpirationDate	20120218	20120218	20120218

OpenInterest	472	0	0

Table 2 (below) provides the name, description, and data type for each data field (column) in the Options OI data file.

Table 2: CSV File Fields Schema

Field	Type (Format)	Description
TradeDate	string (yyyymmdd)	Trading date in yyyymmdd format
Timestamp	string (HHMMSSmmm)	Open interest event timestamp in milliseconds **Excel Note**: Excel displays incorrect timestamps unless the Timestamp column is imported as text.
Ticker	string	OPRA symbol name
CallPut	string	Option type (Call or Put) displayed as “C” or “P”
StrikePrice	decimal	A fixed price for buying or selling an underlying security
ExpirationDate	string (yyyymmdd)	Expiration date of option contract in yyyymmdd format
OpenInterest	integer	The total number of options contracts held by market participants for the previous trading day

Timestamp

Event timestamp is in milliseconds, ET. Field format: HHMMSSmmm, where

HH: Hour

MM: Minute

SS: Seconds

mmm: Milliseconds

For example, 063007975.